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Silver and Gold

AND THEIR RELATION TO THE

PROBLEM OF RESUMPTION

BY

S. DANA HORTON

1911

Οἷον δ' ὑπάλλαγμα τῆς χρείας τὸ νὸμισμα γέγονε κατὰ συνθήκμν. καὶ διὰ τοῦτο τοὔνομα ἔχει νόμισμα, ὅτι οὐ φύσει, ἀλλὰ νόμῳ ἐστί, καὶ ἐφ' ἡμῖν μεταβαλεῖν καὶ ποιῆσαι ἄχρηστον.—ARISTOTLE.

"Electa materia est cujus publica et perpetua æstimatio difficultatibus permutationum æqualitate quantitatis subveniret."—JULIUS PAULUS.

"The intrinsick Value of Silver" [or of Gold], "considered as Money, is that Estimate which common Consent has placed upon it."—JOHN LOCKE.

"Keine Ursache aber [eine Veränderung im Münzfuss vorzunehmen], kann dringender als diese seyn: Wann nemlich andere Nationen in ihrem Münzfusse eine solche Veränderung getroffen haben welche der Wohlfahrt ihrer Nachbarn nachtheilig fallen, und deren Drückung oder Untergang befördern kann."—JOHANN PHILIP GRAUMANN.

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1877

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DEDICATION.

In the Debate in the House of Representatives, on the Legal Tender Act, at Washington, on February 5, 1862, Hon. V. B. Horton, of Ohio, said, among others, the following words:

If this bill passes, as I hope and pray it will not, this will be a point from which we shall date a new financial system in the United States. . . . .

Being a member of the Committee of Ways and Means, I have been engaged in working according to the best of my ability, saying nothing, ... but I wish to utter my voice of warning against being driven by a supposed and asserted imperious necessity into this measure.

It is conceded to be against all the teachings of experience; against all our sentiments of right, and, against all our opin-

ions about political wisdom. . . . . It has been asserted upon this floor, with the utmost apparent sincerity, that this is a measure, not of choice, but of necessity. . . . . But, Mr. Chairman, that assertion is only reiterated, not proved.

Where is the proof that it is a matter of necessity?

[It has] not been made apparent so far as I have been able to discover. I have failed to hear any argument that it is necessary. I know perfectly well that the Secretary of the Treasury thinks that it is necessary, and I have the utmost confidence in his ability and zeal. I think he is mistaken. At any rate, whether he is mistaken or not, he has not furnished us with proof of the correctness of his opinion. . . . .

There is no necessity for us to blight the fair fame of the Government, to impair the public morals, to set afloat the Ship of. State, in a fog, on a sea of bubbles, where no human skill can direct or control it, and where ruin is as inevitable as cause is sure to precede effect. . . . .

The country never was so wealthy as to-day—never was

so little due to foreign countries as to-day—it never before had as much property, and never was so free from embarrassments. The only drawback is, that the Treasury wants Money to an immense amount. . . . .

Can we best accomplish our purpose by a Legal Tender Treasury-note Bill, or can we best do it by going to the capitalist of the country and saying: "We are a powerful nation, an honest nation, a wealthy nation engaged in an effort to put down a gigantic rebellion. All that is valuable to us, depends upon our success. The country is powerful; the people are full of patriotism; we are providing a sure fund to defray the ordinary expenses of the Government, to pay the interest of the public debt, and a fund with which ultimately to redeem the principal. What we desire to borrow is to be expended in the suppression of this infamous rebellion. We have not only the means, but we have the will, to meet all our engagements promptly." . . . .

Has any gentleman here any doubt of the ability of this country to furnish means to carry on this war? . . . .

What will be the effect (of this measure)? . . . . I do not believe there is any new thing in the laws of finance. Confusion and uncertainty will extend in relation to the value of all exchangeable articles. You have no standard, for the Standard of depreciated Paper Currency changes from day to day, and hour to hour, and all the legislation of Congress can not make Paper Currency anything but what it is. . . . . Inflation of Prices will be the result, and when Inflation of Prices begins, exports decrease and imports increase. Agricultural interests will be injured to an incalculable extent, and the next great result will be upon us, which will be the export of Gold to pay debts abroad for excessive importations superinduced by the Inflation of Prices here.

Every man who has foreign relations, in any shape, will send his Coin out of the country. Why? Because he will flee, as

from an infected district, a country where there is no security for property. . . . .

In the end, the Government will be vastly the loser. . . . .

The plan suggested in the bill of the member for Vermont, will, if followed up by judicious and energetic measures, ... accomplish the purposes of the Government. These notes have all the characteristics for circulation which [those] of Mr. Spaulding's bill will have, save the Legal Tender clause. You have all that is valuable in the credit of the United States in this form, ... and it keeps the Specie Standard. . . . .

Among the people, what will be the effect (of this measure)? The first shock will be that the moral sense of the country will be outraged, ... It is not safe for a legislative body to teach the people laxity of morals. Our Government, within the last four or five years, has clandestinely taught lessons of corruption, widely enough and well enough understood to corrupt public morals as far, at least, as the extreme point of safety. And when, in solemn legislative act, we say that wrong shall

be right, the virus of dishonesty will extend to limits you can not very well calculate. I, for one, will have no part or lot in a legislative act of that sort. . . . .

It disgraces the Government under which we live; it is worse than forty defeats upon the battle-field; it can not be wiped out by any future heroism; it is saying to the world, we are bankrupt—we are not only weak, but we are not honest.

To him, who, in saying these words,
invited the unthinking condemnation of his party
and of his constituents, this contribution to debate
upon the tardy cure of ills which he,
foreseeing, vainly strove to avert from his country,
is dedicated,
as a token of affection for a father,
and of veneration for a man.

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CHAPTER I.

INTRODUCTORY.

"No reason can be more urgent in inducing a nation to alter its Money Standard, than the fact that other nations have introduced changes in their Monetary Systems which threaten injury or destruction to the prosperity of their neighbors."

So wrote, in the year 1761, a Privy Councillor for Finance of Frederick the Great of Prussia.

In those days, Silver being, according to this authority, an important product of German mines, "the interests of Germany demanded that she should further with the greatest zeal the raising of the price of Silver."*

To-day, upon grounds partly political and partly economical, an opposite policy has prevailed in Berlin.

Sectionalism and the Silver Standard were identified with the Germany of the past, while, for the new order of things, the Gold Standard presented itself ready to act as a powerful agent in the consolidation of the new Empire.†

Successful as a political measure, as an economical measure, except as a unification of the German Systems, the Coinage Reform has not been a success; the Silver Thaler bids fair to remain in circulation for years, and Germany has herself borne a share in those economic consequences of a change in Monetary Systems which weigh upon the world in a manner so aptly illustrating the acumen of the Prussian Councillor.

On every side of the planet, in every language, men are discuss-

* Herrn Johann Philip Graumann's Königlich-Preussischen-Geheimen Finanz-Raths und General-Directors derer Königlichen Münzen, etc. Gesammlete Briefe von dem Gelde, von dem Wechsel und dessen Cours, von der Proportion zwischen Gold und Silber, etc. Berlin, Voss, 1762, pp. 37, 38.

† "More closely than one would believe, is the maintenance of the Silver Standard bound up with our former condition as a League of States, and the introduction of the Gold Standard, which would be endangered even were the different States to have the right of coining Silver change, is far more closely allied than one would suppose, with Emperor and Empire. (Kaiser und Reich.) Knies. Das Geld, p. 242.

ing the dangers to their prosperity which may arise from changes in the Monetary Systems of other countries, and are debating what may be the wisest policy for themselves.

While Gold Dollars are coining in Japan, the varying Gold price of Silver which agitates New York and Paris, excite a like interest in Melbourne and Bombay, and a National Bank President writes a book upon "The Money Question" in the atmosphere of the Spice Islands.*

Philosophic historians have long been wont to point out the civilizing influence of commercial intercourse, but it has been reserved for these latter days, with one touch of nature, by self-interest, to "make the whole world kin," and by the solidarity of the Money-market sharply to enforce upon the populations of the entire planet the necessity of union and mutual support.

The course of instruction has been a severe one; a myriad of lives have been blasted through the fluctuations of values and paralysis of industry of the past few years; in producing which Monetary Legislation has been so important a factor; but for the enduring generations, of course, the gain will be great, if only the lesson be comprehended.

Unfortunately for mankind, the out-look in this regard is not encouraging. The guiding self-interest of the nations shows but little sign of new enlightenment, and fully to take this lesson to heart is to admit that a ruling majority, in leading nations, may, on a large scale, be mistaken both in its economical theories and in its ascertainment of facts.

The general disposition to demonetize Silver, manifested by the civilized nations, was itself a declaration of war with the interests of the so-called semi-civilized nations, and indifference to the moral claims of Asia, on the part of Christendom, is inauspicious. Within the circle of the Western Nations, the adoption of Gold by Germany, emulating, after many years, the example of England, has, in a manner, compelled other nations, if only in self-defense, to join the movement.

And yet, even had the anticipations of an increased annual product of Gold been realized (as they have not been), the change, tending, as it must, to increase the value of Gold, as well as to diminish the value of Silver, meant that millions who had sown should not reap, and that many should reap who had not sown; while, in the main, it meant, in the Western World, profit to cred-

* Van der Berg. Te Muntquestie, Batavia, 1876.

itors at the expense of debtors; profit to Europe at the expense of the United States; profit to specie-paying, at the expense of non-specie-paying nations.

In causing a fluctuation of values, it discouraged enterprise; in promising, in the degree to which Gold-monometallism should be established, a rise in the value of Money, it checked productive industry.

Such, at least, were the views of the minority of thinkers who were overruled.

For it was not without clear warning and prophesy of evil that this movement was entered upon;* and the present hope for united action in a common interest rests less upon faith in equity than upon the chance that the self-interest of the various nations may be awakened to a sense of personal danger.

The times do not, therefore, seem to be favorable to that union and mutual support which self-interest, if it were sufficiently enlightened, would counsel to all members of the brotherhood of nations.

M. Feer-Herzog, the distinguished representative of the Swiss Republic in the Latin Monetary Union, in addressing a monetary commission in Paris, said "there are thus two milliards of silver (in Germany and Austria) which demand that they be converted into Gold: because the States which possess them are resolved to adopt the Gold standard.

"This danger will reproduce itself in the case of other States which may exchange their Silver for Gold.

"As this tendency is general in Europe a steeple-chase [sic] will before long be inaugurated.

"The State which demonetizes first will do so with but little loss, while the State which shall have hesitated and waited will undergo the losses resulting from the demonetizations which have preceded its own, and so will pay for all the rest."

He adds: "The German authors have perfectly understood and explained the advantage which will accrue to their country from acting speedily, while the States of the Union still hold to the Double Standard."†

This was said in the spring of 1870, while Napoleon was still Emperor at Paris.

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*See Wolowski. L'or et L'Argent, 1863. Seyd, Bullion, etc., 1868.

†Feer-Herzog La France et ses alliés monetaires, etc., Paris, 1870, p. 71. See also Knies Das Geld, p. 242.

A few years later French Gold had enabled united Germany to inaugurate this steeple-chase; while still later, France, with her allies, refusing to become the passive instrument of Germany's self-interest, has, economically speaking, to carry out M. Feer-Herzog's figure, by deferring specie payment, and limiting in the Latin Union the coinage of Silver, put Germany into the ditch, merely, as a Frenchman has said, "to defend herself from the Prussian maneuvre."

The northwestern countries of Europe followed Germany, and the adoption of the Gold Standard by the United States was marked by the coinage for export of a Trade Dollar, whose changed relation to the Gold dollar, seemed to point the way to a depreciation of silver.

This general demonetization, which, although to a great degree merely nominal, yet closed to Silver the markets of the Western World, was not slow in causing an eddy in the Gold price of Silver, to which force was added by an increase of annual product and a check of export to India, and which has seemed to open up a bottomless abyss, and to the fancies of many makes the entire sea of Silver Prices unnavigable.

England, moved by the distress of her great dependency, as well as by the danger to herself of a rise in Gold, now begins to appreciate a situation which is the natural result of the application of her great example, and hopes that something will be done for Silver.

This, in fact, may be taken as a homely statement of the prevalent feeling in the brotherhood of nations; each hopes that some other will do something for the common good; or, as was said by a leading authority, as long ago as January, 1875, "either that one of the great Gold-using nations will abandon the Gold Standard, or that the supply from the mines may be increased."*

The latter remark suggests an opportunity for fame unique in history. The unanimous applause of the world awaits the discoverer of new Gold mines.

In the meantime that wave of convincing argument in favor of Gold-monometallism which had swept over the Western World, and the force of which was largely due to the asserted permanence of the value of Gold, bids fair to be overwhelmed by simple facts which point to a rise in its value—a signal and irrefragable proof of its non-exemption from the common fate of mutability.

* London Economist, January 16, 1875.

The situation of the American Union at this juncture, standing, as she does, at the threshold, not merely of Resumption of Specie Payment, but of a contest, scientific as well as political, between the manifold forces of the Assignat,* the Bank Note, and the Specie Certificate, imposes upon American thinkers a burden of peculiar responsibility.

Paper Money Inflation in its more repulsive forms has been scotched, but not killed, by the blows which the honesty and common sense of the people have dealt, and others of the hydra-heads are ready to rise.

Indeed, what has been achieved is merely a preparation for a new order of questions, which, for their proper handling, require a special study and acumen which, in the contest against an over-issue of Promissory Notes, as Legal Tender, was, strictly speaking, not necessary.

If I mistake not, the former champions of sound currency have not as yet, in public discussion, shown themselves equal to this new occasion.†

In the public press, for example, what, for convenience, may be characterized as a "Cockney School," resting on its laurels of past loyalty to sound currency, has made itself conspicuous on the side of Gold-monometallism, by an exceptional absence of knowledge and ratiocination combined with violence of feeling.‡

In proclaiming themselves, however, as the elect custodians of the public credit, the representatives of this curious phase of opinion

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*I use the word Assignat instead of Greenback to avoid confusion. The existing Greenback has a distinct individuality; being a product of the Civil War, and limited in amount. A new issue must differ from this in character so entirely that it deserves a new name.

†I refer, of course, to public discussion outside of the Debates in Congress. As to the latter, see a brief notice, page 49.

I should also add, the editorial columns of the daily *Cincinnati Commercial* have brought acuteness and learning to bear upon the Silver Question, and I should make a like acknowledgment in reference to the *Bankers' Magazine*, of New York.

The above characterization of the State of Debate in the text was written in the summer of 1876. Since then, I am glad to admit, the scene has changed (see Appendix 179); but I have left the passage as first printed.

‡There is a tone in some expressions of this school which really seems only compatible with a sort of *parvenu* sensitiveness, as if there were an air of "good society" about the yellow metal, which promised advancement to the advocacy of the exclusive use of it as Money, and as if there were something derogatory in "having anything to do with" Silver.

have, although in a manner which mars their influence, reinforced the most wholesome element in the discussion.

On the other hand, much crudeness has likewise been put forth in advocacy of the unconditional restoration of the Old Silver Dollar, as the "Dollar of the Fathers."

Like many popular cries, this, however excellent in its sphere, threatens to distract attention from points of the situation of far more import to the interests of the people than the fixing of the number of grains of Silver in a Coin; and men are led into danger of forgetting that legislation is for the present and for the future, and not for the past.

In the meantime, that shining array of misdirected talent which has obstructed the Restoration of a Specie Basis is gathering its forces and changing sides around this new order of questions, and threatens to naturalize a Mexican anarchy in our Finances.

In this state of the controversy it has occurred to the writer to hope that the following result of studies undertaken in the intervals of professional business for the purpose of obtaining a clear view of the situation, might not be without use as a contribution to debate.

POSTSCRIPT.—To the Gentle Reader, if such there be for a subject and work like this, I desire to say that I approached this question, as far as I can remember, without prepossessions,* and that I have aimed to be a servant of truth. I have endeavored to look at the questions, not narrowly, but in their wider relations to the future, and to comprehend the arguments on the various sides.

Although thus recording my views, I have not shut my mind to new light upon the subject. I am sensible of many imperfections in this Essay, and shall be indebted for proof of whatever of error there may be in what I have written.

POMEROY, OHIO, *September*, 1876.

NOTE.—It is proper, in justice to the various authors whom I have quoted in the course of this essay, that I should call the reader's attention to the fact that the italics, or rather, the "spacings" in these quotations, are my own.

*See Appendix A.

CHAPTER II.

THE STOCK ON HAND AND ANNUAL SUPPLY OF THE PRECIOUS METALS.

Popular impressions in reference to supply of Money—Present and future—Opinion of Soetbeer as to *rôle* of statistics of Money—Estimates of Chevalier and Soetbeer of total production up to 1848—Estimates of Tooke - Newmarch, Seyd, Xeller, Chevalier—Annual product at different periods—Annual product since the Gold Discoveries—Annual consumption—Metallic circulation in Western World—Amount exported to Asia—Estimate of total stock now in the hands of man—Annual loss.

To many minds, it would seem that a sort of "divinity doth hedge" the Kingly Metals from the profane curiosity of man—some mysterious quality, to which testify their indestructibility, their seeming providential discovery and distribution, and the eagerness with which in all ages of the world men have sought for them, whatever their price.

It is probably owing to a belief of this kind—perhaps only half-consciously entertained—that, from many men who are thoroughly familiar with the difficulty which individuals feel in getting Money, the idea that the whole world may suffer in this same way does not find ready assent.

The excuse for the sway of the one idea and the rejection of the other, is briefly expressed in the saying *omne ignotum pro magnifico.*

It is simply because they do not know what the amount on hand is, and can not forecast what the annual product will be in the future, that they refuse to consider that the supply may fail.

But, of course, the Legislator is no more "above statistics" than, in the story, the Emperor Sigismund, in his blundering speech, was, in reality, "above grammar;" and it needs no serious argument to prove that estimates of the stock of the Precious Metals have the merit which estimates usually have:

"Every one who busies himself, for any time, and with earnestness, about questions connected with Money, will come to the conclusion, first, that statistical estimates of the production and amount in circulation of the Precious Metals, albeit, in spite of all the labor and care expended on them, they remain incomplete, yet are positively indispensable for every discussion upon the fluctuations of Prices; and, secondly, that amounts given as conclusions from

general reasonings on this subject, can only be considered as bold attempts at an approximate estimate." *

Such is the opinion of Soetbeer, one of the foremost authorities upon such questions, whose exertions for the reformation of German currency, begun thirty years ago, were crowned with success in the unification of German coinage.

True, for aught we can tell, Africa may annul all calculations by playing in the future the part which Siberia, California, and Australia have filled in the central portion of this century; and, in the meantime, in Spain and in Guiana, the hopes of gold-seekers are said to have risen to fever-heat.

Be that as it may, the annual product has hitherto been but a small percentage of the stock on hand; the present and the past remain controlling elements of that practical decision which can, at best, look but a few years forward; and it is plain no reckoning without one's host can be more inexcusable than, in deciding upon the employment of this or that material for Money, to omit to take counsel of the Statistics of Supply.

For the total production up to the year 1848, Soetbeer quotes from Chevalier, an estimate of which the following is a reduction in dollars, taking the mark-banco at 36.100 of the silver dollar, and 37.100 of the gold dollar:

	GOLD.	SILVER.	TOTAL GOLD AND SILVER.
America	$1998740000	$5261040000	$7259780000
Europe, exclusive of Russia	103600000	381600000	485200000
Russian Empire	22200000	63360000	85560000
Africa and Islands	503200000	.....	503200000
Stock on Hand in Middle Ages	59200000	144000000	203200000
	$2686940000	$5850000000	$8536940000

Opinions vary widely, as Soetbeer remarks, upon what proportion of this grand total was still in circulation in 1848 among the Western Nations.

The amount can, however, he says, hardly be estimated at more than 2920 million dollars. Of the remainder, more than half, he

* Beiträge und Materialien zur Beurtheilung von Geld und Bank Fragen, p. 111, note. Hamburg, 1855. See Appendix I.

estimates, has been exported to Asia, while less than half remains to be accounted for by loss through wear and tear and consumption in the arts.

In Tooke-Newmarch's History of Prices, Mr. Newmarch estimates the total amount of Gold and Silver in the Western World, in all forms, as follows:

[In Million Dollars.]

	1803.	1848.
Gold	1716.9	2716
Silver	3094.3	3880
Total Gold and Silver	4811.2	6596

This estimate is decidedly larger than that of Soetbeer, who would appear to allow only about 5 billion to the total stock of Europe, Africa, and America. It also exceeds that of Chevalier and Xeller.

Ernest Seyd gives, for 1868, £700 millions of Gold, £550 millions of Silver, as the total amount of Money in use in the world.

Michel Chevalier (in the second edition of La Monnaie, 1866, p. 574), gives, as an estimate of the total amount of Gold and Silver in the Western World (*au pouvoir de la civilisation occidentale*), in 1866:

Silver	$3049035000
Gold	4492700000
Total	$7,541735000

Friedrich Xeller, one of the leading German writers upon the subject, gives the following estimate for the same year:*

[Five Figures omitted.]

	STOCK IN WESTERN NATIONS.	IN CIRCULATION.	USED OTHERWISE
Gold	$37442	$25476	$11966
Silver	28424	12903	15521
Total	$65866	$38379	$27487

* F. Xeller, Die Frage der Internationalen Münzeinigung. Stuttgart, 1869.

Soetbeer gives (in the work above cited) the following estimates for total annual production of the Precious Metals. His estimates are here stated in dollars, estimating the mark-banco at 36½ cents:

About the year	1500	$ 730000
" "	1550	2920000
" "	1600	10950000
" "	1650	17155000
" "	1700	22265000
" "	1750	35710000
" "	1800	55480000
" "	1850	129575000

With reference to the annual product of the mines, since the era of the Gold Discoveries, while the divergence of authority is not very great, yet agreement has not yet been attainable.

The following table is the fruit of a discussion carried on in the columns of the London Daily News, in which Mr. Hendriks, well and favorably known in connection with the Gold question, took part. Both parties finally agreed upon this table.*

* M. A. N. Bernadakis, of Athens, in his work, "De la Quantité des Metaux Précieux et du chiffre des Monnaies," etc. (Paris, 1875), gives the following estimate for total production of Gold and Silver:

Weight in kilograms. Value in million francs.

	Gold.		Silver.		Total val. at 1 to 15½.
	Wt.	Val.	Wt.	Val.	
Stock, in 1492	725,900	2,500	11,261,261	2.500	5,000
Amer. production, 1492 to 1848	2,910,977	10,026	122,050,724	27,122	37,148
Other countries, 1492 to 1848	2,486,000	8,552	20.402,000	4,529	13,081
Total product, 1848 to 1874	7,678,368	26,414	51,273,000	11,383	37,797
Total	13,801,245	47,492	204,986,985	45,534	93,026

For wear, and tear, and loss, M. Bernadakis is disinclined to make any large deduction.

In the Documents relatifs à la question monetaire, published (folio, Bruxelles, 1874), as a Report to the Belgian House from the Minister of Finance, M. Malou, a table is given (page 165), taken from the Report of the Swedish Monetary Commission of 1869, in which the annual destruction in the Western World for 1867 is placed at 17,800 kilograms of Gold, and 415,100 kilograms of Silver. This is equal to a destruction, in the Western World alone, of an amount equal to 8 per cent of the total annual product of Gold for 1867, and 25 per cent. of the total annual product of Silver.

ESTIMATES OF TOTAL ANNUAL PRODUCT, 1852–1875, IN MILLIONS OF DOLLARS (371.25 GRAINS OF PURE SILVER AND 23.20 GRAINS PURE GOLD).*

YEAR.	GOLD.	SILVER.	TOTAL.
1852	174⅛	38	.....
1853	149½	38	.....
1854	122½	38	.....
1855	130⅜	38	.....
1856	142½	38	.....
1857	128½	38	.....
1858	120¼	38	.....
1859	120¼	38	.....
1860	115	38	.....
1861	110	40	150
1862	103⅜	42	145⅜
1863	103⅜	46	149⅓
1864	109	47	156
1865	116	48¼	164¼
1866	116¾	47¼	164
1867	112	50½	162½
1868	116	46¾	162¾
1869	116¾	44½	161¼
1870	112½	47	159½
1871	103	56½	159½
1872	98	60¾	158¾
1873	100	65½	165½
1874	87⅓	67	154⅓
1875	94	57¾	151¾

*The estimates of the London Economist give less, those of Soetbeer greater amounts than the "compromise table" above given.

The Report of the Committee of the House of Commons on the Fall of the Gold Price of Silver gives the following table (Appendix, 21, i), which seems to have been prepared by the Bureau of Statistics:

THE WORLD'S PRODUCTION OF GOLD AND SILVER BY YEARS AND EPOCHS SINCE 1848.

YEARS AND EPOCHS.	GOLD.	SILVER.	GOLD & SILVER.
	Million Dollars.	*Million Dollars.*	*Million Dollars.*
1849	26·4	43·9	70·3
1850	58·3	43·3	101·6
1851	86·4	42·6	129·0
Total	171·1	129·8	300·9
Annual Average	57·03	43·26	100·3

1852	110·6	41·9	152·5
1853	130·7	41·6	172·3
1854	146·8	42·1	188·9
1855	146·7	43·2	189·9
1856	139·4	44·4	183·8
Total	674·2	213·2	887·4
Annual Average	134·84	42·64	177·48
1857	133·1	46·0	179·1
1858	115·2	48·0	163·2
1859	104·1	50·2	154·3
1860	103·0	52·6	155·6
1861	102·6	55·3	157·9
Total	558·0	252·1	810·1
Annual Average	111·6	50·42	162·02
1862	102·4	58·3	160·7
1863	101·6	63·8	165·4
1864	101·1	67·4	168·5
1865	98·9	68·9	167·8
1866	98·2	69·1	167·3
Total	502.2	327·5	829·7
Annual Average	100·44	65·5	165·94
1867	98·1	69·2	167·3
1868	98·9	69·3	168·2
1869	99·0	69·3	168·3
1870	98·6	69·4	168·3
1871	97·2	72·1	169
Total	491·8	349·3	841·1
Annual Average	98·36	69·86	168·22
1872	94·8	73·4	168·2
1873	92	74·7	167·0
1874	89	76·2	166·1
1875	87.4	77·7	165·1
1876	... ..	.....	.....
Total	364·4	302·0	666·4
Annual Average	91·1	75·5	166·6
Total from 1849 to 1875	2,761·7	1,573·9	4,335·6
Annual Average	102·29	58·29	160·58

Of the annual consumption of the Precious Metals, suffice it to say here, that the destruction, as far as human uses are concerned, is variously estimated at $\frac{1}{400}$ (Tooke-Newmarch), or $\frac{1}{200}$ (J. R. McCulloch) for each year of the total stock on hand.

Xeller gives estimates both at $\frac{1}{2}$ per cent. and $\frac{1}{4}$ per cent., but leans to the latter. Upon the total product of the world, from 1492 to 1848, which Xeller fixes at about 8470 million dollars (including 200 million for the European stock in 1492), a yearly loss of $\frac{1}{4}$ per cent. would give a total loss of about 1477 millions; while a yearly loss of $\frac{1}{2}$ per cent. gives a total of 2427 millions.

The report of the Swedish Parliamentary Commission is said to have adopted $\frac{1}{2}$ per cent. as its basis of calculation.

As to the second form of "consumption" of the Precious Metals, namely, their employment in the arts, the estimates of Xeller (following McCulloch, Roswag, and Du Puynode) reach a sum of about 39 million dollars per annum for Europe and America.

For circulation in the western world Xeller gives the following table:

[In Million Francs.]

	GOLD AND SILVER.	
1803	10000	
1847	13000	5000 Gold. 8000 Silver.
1865	20100	13200 Gold. 6900 Silver.

It will be observed that these estimates restrict themselves in the main to the stock on hand in Europe, Africa, and America, and throw but partial light upon the reservoirs of Asia, except as indicated by the portion of the total product since 1500, known or believed to have been exported thither.

Among the estimates of the total amount of Gold in the hands of man, is one quoted by Ernest Seyd (in his work Bullion and the Foreign Exchanges, 1868); according to which this amount was, in 1868, in value, £1200 millions or 5820 million dollars.

This amount, as this author remarks, would weigh 10500 tons (of 2000 lbs.), and would fill out a cubic block about 26 feet each way.

The total amount of Silver has been the subject of estimates which vary more widely, perhaps, than any others, extending, according to Seyd, from 500 to 2000 million sterling.

The unknown factors of the problem, are, of course, to be sought in Asia, whose ancient civilizations, while they must have destroyed,

yet certainly have accumulated quantities of metal of which it is impracticable to attain trustworthy accounts. That Gold is also held in large quantities seems probable, but it appears certain that the total stock of Gold in Asia is but a fraction in value of the Silver there held.

Of the total product of the world, from 1492 to 1848, Xeller estimates 28 per cent. as exported to Asia, and since then this percentage has been from time to time exceeded. To the demand for Indian cotton during our civil war, is mainly to be attributed an increased exportation to India, which, from 1860 to 1866, absorbed considerably more than the entire Silver product of those years.

It is farther stated, upon apparently good authority, that, from 1867 to 1874, more than one-half of the yearly product of Silver was absorbed by India.

Quenstedt, a German author, gives the total stock of Silver in the world, in 1868, at about 7340 million dollars.*

The following may serve as an estimate of the total stock in the hands of man in 1876.

I ask the reader's attention at the start, however, to the fact that it is confessedly a crude approximation, of no value of its own, apart from that which is given by the authorities upon which it is based.

The assumption of 500 millions of Gold and 1000 millions of Silver, as the stock in Asia and the Islands, in 1492, is one for which I can give no data.

A recurrence to the opinion of Soetbeer, cited in the beginning of this chapter, will, I hope, justify this bold attempt at an approximate estimate.

To be secure in reasoning upon such a basis, it is of course desirable that one should understand, as nearly as may be, where the weak points are in his estimate, and so when inquiry asks for results dependent on facts thus weakly evidenced one should make his conclusions correspond with the indeterminate character of his premises.

* M. Quenstedt. Die neuen Deutschen Münzen. Berlin, 1872.

ESTIMATE OF THE PRECIOUS METALS NOW IN THE HANDS OF MAN.

	GOLD.	SILVER.	GOLD.	SILVER.	TOTAL.
Total stock in Europe, civilized Africa, and America, in 1848.	.....	.....	2000	4000	6000
Total stock in Asia, in 1492, estimated at	500	1000			
Total new product absorbed by Asia (Xeller), 1492 to 1848....	2375				
Total for Asia, up to 1848	3875				
Total loss, 1492 to 1848, estimated at 20 per cent.....	775				
Total in Asia, 1848.....	3100		600	2500	3100
Total product, 1848 to 1876.....	3102	1268			
Deduct total loss, 1848 to 1876, estimated at.....	250	250			
Total increase 1848 to 1876.....	.....	.....	2852	1038	3890
			5452	7538	12990

If, then, this be the total amount of the Precious Metals in the hands of man, the estimate of $\frac{1}{4}$ per cent. would give about $32\frac{1}{2}$ million, and the estimate of $\frac{1}{2}$ per cent. would give about 65 million, as the annual loss.

If, then, we accept Xeller's estimate that $2547\frac{1}{2}$ million dollars worth of Gold were, in 1866, in use for purposes of exchange in the Western World, it would seem not remote from fact to assume that in the ten years that have since elapsed this stock has been augmented to 3000 million, by additions of new Gold, import from Asia, and melting down of manufactured articles.

With an annual product of 95 millions, deducting from $13\frac{1}{2}$ to 27 millions, as required to make good the annual loss, we should find from 68 to $81\frac{1}{2}$ millions, free for uses other than replacing loss, and ready to be divided between the arts and the Mint.

Deducting, in like manner, from an annual product of Silver of 65 millions, an annual loss of about 19 to 38 millions, we find from 27 to 46 millions of the annual product of Silver to be divided in like manner.

It should, however, be remembered that "consumption" in

coinage and the arts, and "annual loss," to a considerable extent, cover the same ground.

The "loss" includes the wear and tear of coins, plate, etc., to repair which recoinage and renewal of stock of plate, etc., is necessary.

Of the total amount of Metals used as Money, the following estimate was made for 1870 by Mr. Ernest Seyd:

In Millions.	*Gold Coin and Bullion.*	*Silver Coin and Bullion.*	*Token Coinage.*
Europe	£520	205	80
Asia	10	250	40
America and the Islands	170	50	25
Total	700	505	145

It may serve the reader's convenience if, with another bold attempt at an approximate estimate, we should sum up the results we have gained: *

In 1876. *In Millions.*	*Gold.*	*Silver.*
Total stock in the hands of man	$5,500	$7,500
Total used as Money by man	3,600	3,200
Annual Destruction and Loss	20	30
Annual Product	95	75
Net Annual Gain	75	45
Annual consumption in Arts in addition to repairing loss of existing Coin, Plate, etc.	15	15
Net Annual Supply to be devoted to use as Money	60	30

We also arrive at the following important truths:

1. The present annual addition of new Gold is about 1⅔ per cent. of the total stock of Gold Money; while that of new Silver is about 1 per cent. of the Silver Money.

2. The possibility of reinforcing metallic Money from metallic stock existing in other forms is, however, by far the greater in the case of Silver, there being twice as much Silver as Gold in hoards, plate, jewelry, shrines, etc.

3. The fluctuations of total annual product in either of the two metals together are far less than the fluctuations of annual production of either metal taken singly.

4. Demonetization of Silver as full Legal Tender, if accomplished in the countries, in which it has already nominally taken place (by stoppage of coinage withdrawal of Legal Tender, etc.), leaving an average stock of Token coinage, would lessen the existing stock of metallic Money in the world by about $1,100 millions (Feer-Herzog admits this), 18 per cent. of the total sum of existing metallic Legal Tender, and 25 per cent. of the Legal Tender metal of the Christian nations.

* In giving these estimates, however, I again caution the reader that (except as to Annual Product) they can be only crude approximations to the truth.

CHAPTER III.

THE ARGUMENTS FOR THE VARIOUS STANDARDS BRIEFLY STATED.

The argument for the Gold Standard—Answer for Silver—Bi-metallic Money, or Double Legal Tender—Answer for the Single Standard—Reply for Bi-metallic Money—Garnier's System, or Bi-metallic Money with variable ratio—Other suggestions.

In the current discussions of the day the adoption of Silver as the single material for Standard Money is treated as out of the question, and the "Battle of the Standards" resolves itself into a contest of "Gold-monometallism" against the Double Legal Tender System. My object being to present in brief outline the argument as it stands, I shall omit consideration of the Single Silver Standard.*

THE GOLD STANDARD.

Money is a Measure of Value, and there can be but one Standard Measure of Value, just as there is but one Standard Measure of Length, Weight, or Space.

The superior value of Gold, compared with the same bulk or weight of Silver, gives to Gold an even more than corresponding advantage in fitness for use as money:

1. It is more portable, giving great values with a minimum of weight, and hence is best adapted for facilitating international exchanges, as well as to be carried on the person.

2. It costs less to coin Gold, and Gold is in general less destructible than Silver.

Again, its intrinsic qualities and its history guarantee to Gold a permanence in value greater than that of Silver.

This is shown by the fact that while the value of both metals has fallen greatly in the centuries that have elapsed since the discovery of America, yet Silver has fallen more than Gold. In Germany, for example, it was 1 to 10.50 in 1500; 1 to 16.25 in 1813.

The superiority of Gold to Silver in its general use in the arts, secures to it a permanent demand which guards against its depreciation; it would oust Silver from use as it is, if it were not for its high price.

* Chevalier's La Monnaie remains, as far as I am aware, the best exposition of the merits of the Silver Standard.

The cost of production of Gold remains permanent, while that of Silver is progressively diminished by the invention of new processes.

The time will come when the only limit to the production of Silver will be found in its extreme cheapness.

Gold can not fall without dragging Silver with it. Silver, on the contrary, may fall without seriously affecting Gold.

ANSWER FOR SILVER.

Gold can not be coined in values minute enough to be of use as change. There is no Gold Coin that can take the place in Social Economy which the five-franc piece, the piaster, or dollar have occupied.

Freight charges for transportation of Gold and Silver are calculated on the value and not on the weight.

For deposit, the difference in bulk and weight is of little moment.

The history of the Precious Metals shows wide variations, which can not logically be charged to the innate variability of one factor alone. Among the Greeks, about 400 B. C., the relations stood 1 to 10; in Rome, in the time of Cæsar, 1 to 18$\frac{3}{4}$; a few years ago, in Japan, it was 1 to 4.

In this century changes of price have been chiefly due to the causes affecting Gold alone, viz., war demand and the Gold Discoveries; or are due to Demonetization of Silver, which signifies also an abnormal demand for Gold, and, properly speaking, is excluded from the argument on variability.

To quote the effect of Demonetization to show the "variability of Silver" is to repeat the child's puzzle of the man who, being accused of having killed a sheep, showed that the sheep was dead, and so asked, how could he have killed it?"

The question at issue in reference to Silver or Gold is—"supposing that neither be demonetized for the benefit of the other, which metal will be likely to vary most in Purchasing Power?"

The cost of production of Gold is largely a matter of luck in finding nuggets, or placers which are fields of small nuggets, and a series of discoveries may, therefore, at any time completely unsettle its value.

Its admitted excellences as Money subject Gold to more sudden and general fluctuations of demand than are likely to affect Silver.

History supplies many instances of a specific "war demand" for Gold as preferable to Silver.

The Gold Standard necessitates a subsidiary coinage of Silver tokens, and under this system the wages of labor are paid in debased Money, the profits of capital in real Money.

BI-METALLIC MONEY OR DOUBLE LEGAL TENDER WITH FIXED RATIO.

(The expression "Double Standard" and its substitutes the Alternative, Compound, or Optional Standard are purposely omitted as leading to confusion of thought.)

This system, in supplying full weight Coins of every needed denomination, combines the substantial advantages of both the Single Gold and the Single Silver Standard, and thus meets all the possible requirements of exchanges of the world.

Either metal being, to a considerable degree, available as a substitute for the other, the local fluctuations of supply and demand of either simply arouse the other to restore equilibrium, and hence this system secures a stability of value of Money, which is otherwise unattainable.

ANSWER.

It is essentially a "Double Standard."

It is an absurdity outside of the pale of economic science; it results simply in an alternation of "Standards."

The measure called Money can not be based upon two unequal units.

The Double Standard organizes disorder.

It exposes business to the fluctuations of two metals instead of one.

The debtor always pays in the cheaper metal, hence the creditor always loses.

The "Double Standard" is instituted for the benefit of Bullion Brokers, Money Changers, Bankers ("Bonanza Jobbers" also in this country), who reap the profit of the fluctuations of the price of the two metals.

Pretending to give two Standard Measures of Value at the same time, it in reality confuses two distinct measures, and shortly leads to a simple alternation of "Standards;" now Silver, now Gold, according as Gold rises or Silver rises above the relation established between the two by law.

The Double Legal Tender with proportion fixed by law and payment in either metal optional with the payor, is merely the transi-

tion stage from a crude and amorphous state of commerce to civilized dealing with an International Money.

The true solution of the question of International Money is the adoption by all nations of one Standard of Value, and that Standard can only be Gold.

The adoption of the Gold Standard reduces the friction of exchanges to the minimum, and introduces certainty and stability into the business of the world.

Gold has long been in practice the chief standard of the civilized nations, and its universal adoption by them is only a question of time.

REPLY.

The History of Modern Commerce proves beneficent results from the use of Double Legal Tender, which exclude the idea of there being any "absurdity" in it.

He who thinks it is outside the pale of economic science requires only a careful study of this History in order to learn what economic science really is.

The argument from metrology, as is shown by economists from Say to Roscher, has no place in the sciences of value.

The French system of weights and measures is based on the constancy of nature; on the belief that the circumference of the earth remains the same; that gravitation remains constant.

Value being a mere relation between commodities, which is determined by the ever variable desires of man, is incapable of producing a Unit which can attain a constancy like that of nature and strip off its innate variability.

The adjustment of Gold and Silver under the Double Legal Tender system in such a way as to correct the fluctuations of either metal, is the best available approach to the desired steadiness of value of Money.

As for the asserted loss of creditors and gain of debtors: if both metals rise unequally in value, as compared with other commodities, the creditor can not lose, nor does the debtor gain.

If both metals fall unequally in value, the so-called loss of the creditor is only a loss of anticipated profit; while to the debtor, to pay in the dearer metal, would be positive loss.

But even in case of a direct fall of one, while the Purchasing Power of the other remains constant, it is erroneous to say that the creditor loses, for the contract is supposed to be an option, and so understood by both parties.

The profit of money-changers inures to the country whose metal is exported, and is but a small tax—and that, too, paid at home—for stability in the value of Money.

The alleged "alternation of standards" does not often take place. Silver and Gold remain Legal Tender, and are used as such; and where this alternation does take place, it is due to Demonetization in other nations; and if all nations supported the Double Legal Tender at one and the same ratio, it could not take place at all.

Both the doctrine of chances and the history of the production of the Precious Metals show that fluctuations in amount of the total annual product of both metals are a much smaller percentage upon the total stock, than the percentage which is given by fluctuations of either metal compared with the total stock of that metal, even if we reinforce the stock of one by an additional tenth for subsidiary Coins.

BI-METALLIC MONEY WITH VARIABLE RATIO.

This name is given to a system which may be briefly described as follows: Starting with some known unit, a certain weight of Silver or of Gold (for example, in the case of France, 5 grammes of Silver 9.10 fine), coins are to be struck in decimal multiples and submultiples in Silver and Gold, the coins to be inscribed with their weight; no permanent proportion between the metals to be fixed by law, but a government commission to fix the legal relation from time to time: at the relation thus fixed for payments during the term prescribed, Gold and Silver Coin to be unlimited Legal Tender.

This plan, suggested by Chevalier (La Monnaie, p. 184–6), and lately advocated in a discussion in Paris by Mm. Courtois and Joseph Garnier, has not, as far as I am aware, been subjected to the test of experience, although all nations seem to have made what may be called partial trials of it, by changing the relation of the metals, usually by increasing or lessening the weight of Gold Coin.*

It differs from the Double Standard in making periodical revisions of the relation of the metals a controlling feature; and, by establishing a Monetary Unit, it excludes the danger of alternate

* Since the foregoing was put into type the writer has received the number of the Journal des Economistes, Paris, for October, 1876, in which M. Garnier gives a matured scheme for the establishment of this system in France, accompanied by an exhaustive discussion of the questions involved. The scheme is to be submitted to the French Assembly.

alterations of the weight of coins, which has been asserted to be the defect of the Double Standard.

If, under this system, a certain Coin or weight in either metal, as the dollar or the sovereign, be made by popular consent the generally accepted Unit, the resulting system would, in an important feature, resemble the Single Standard.

It may be said in favor of this plan, that it dissipates the mystery which surrounds Money. The Coin inscribed with its weight and with, as M. Garnier proposes, the geographical outline of the country for which it is coined, is, to the eye of the ignorant and the idealist as well a certain weight of a certain Metal, stamped for circulation in a certain country.

There is no possibility of any one taking ten grammes of Gold as being the same thing as 155 grammes of Silver, any more than as being a thousand grammes of Tin, and, moreover a Token weight can not be palmed off as real weight. There is no making believe that 9 ounces are equal to 10 ounces.

The confusion comes from the names of Coins, and the way they are treated by the law. Complex and diverse notions are bound together in apparent unity in the name and use of a Coin, which suggest anything else but the simple logic of Money-barter, the exchange of a certain certified weight of Metal.

The pound sterling for example, has since the Norman conquest meant fifty different things.

To an American to-day, a Dollar means a variety of foreign Coins beside those belonging to his own country. Of the latter, are the old Silver Dollar, the Dollar consisting of 2 half-Dollars of impure Silver (the Silver Dollar that may be coined in the future), the Gold Dollar of 24.75 grains, the Gold Dollar of 23.2 grains, the Trade Dollar, the paper Legal Tender and Bank-notes.—Such a use of the word Dollar as this implies, is a snare to induce men into hopeless confusion of thought about Money. All this is avoided by using certain weights of Metal in exchange, and simply calling them weights of Metal.

Contracts payable in Dollars, ought to be held unlawful as gaming contracts.

The following objections suggest themselves:

It would require many years to recoin the entire stock on hand of any nation.

Habit necessitates the use of Coins which have a definite name and historic individuality.

It is impossible to obtain appropriate names out of existing systems of measurement of weight.

To submit to a Public Board the regulation of the Legal Relation between the two Metals, is to create a dangerous power which must become a source of contention in the financial world, and of uncertainty in contracts, and so impair the public sense of the obligation of them.

It is a condition of the effect of a law making Gold and Silver Legal Tender, that the real subject of Money contract should be within certain bounds indeterminate. When B. agrees to deliver 100 bushels of fine wheat, he has the option of selecting his hundred bushels from all the purchasable wheat in the world, and so with Money contracts.

Hence the need of names of Coins, and the perpetual necessity of establishing a legal relation between the two Metals, so that under that name either Metal may be used. If the Double Legal Tender is really to be used, the law must import that he who contracts to pay ten grammes of Silver, or 155 grammes of Gold, can when the time comes, pay the Silver debt with Gold, or the Gold debt with Silver.

Hence when they contract for a weight, while men talk of ten they mean 155, or whatever the market relation is, and hence the confusion may be more confounded than before.

The Double Legal Tender under this system would even more than now expose business to fluctuations of the market prices, and there is, therefore, all the more need that all nations (outside of the one supposed to adopt this standard), should join in adopting Bimetallic Money at one ratio.

But if all other nations are to join, why should not that one join the others?

It may not be amiss to suggest other possibilities. For example, composite coinage—each coin to contain both Gold and Silver.

Or again, it might be suggested that Gold and Silver dollars, coined at a fixed ratio, shall be Legal Tender each for one-half respectively of the amount of any debt at its face, with liberty to the debtor to pay the remaining half by giving an amount in the less valuable Coin equal in value to the proper amount of the more valuable Coin—the rate of the premium to be fixed in accordance with the market price by a Public Board.

CHAPTER IV.

A STANDARD OF DESIDERATA AND STANDARDS OF VALUE.

Money as a commodity—Assignment of Functions of Money to various commodities—Rents payable in kind—Option with the payer—Measures of the value of Money—Standard of Desiderata—Lowe's Reference Table of Value—Its publication in Germany and the United States—Ritter Von Jakob's translation and explanatory essays—Importance of Lowe's theory—Objections suggested by Lowe—Objections of Von Jakob—M. Mannequin's argument for Gold monometalism—Revision of contracts—The scaling of debts—Equity of demand for steadiness of value of Money—Real Money a commodity—False Money a debt—M. Mannequin's Court of Revision—Standard of Desiderata—Multiple Legal Tender and the argument from metrology.

It is an axiom that "Commodities measure the value of Money in the same manner as money measures the value of commodities." *

It is, withal, an essential part of the definition of real Money that it must be a commodity, and as such, of course, being, like all other commodities, subject to fluctuations of supply and demand, it is liable to fluctuations in value.

All the accredited varieties of Legal Tender—cattle, shells, skins, salt, iron, Silver, Gold, platinum, etc.—are alike subject to this fate.

The thought lies, therefore, near the surface, that if men chose they might call other commodities to assist the particular commodity which they chiefly use as Money in the performance of one or other of its Functions.†

Those in which permanence in value is the central idea are of course in special need of such support, and have not failed to receive it.

Rents payable in kind are a familiar application of this idea, and are sometimes payable in either of two commodities, at the option of one or the other party to the contract.

Thus, for example, a rent payable in corn, or its equivalent, at the market price, creates, *quoad hoc*, a "Double Standard" of corn and whatever happens to be Lawful Money.

It is obvious that the option between the two forms of payment

* Ricardo. High Price of Bullion. London, 1811.

† See Chapter VI. 2.

is convenient, while the fluctuations in the value of corn may, by balancing the fluctuations in the value of Money, have secured a rent more permanent in value than a fixed sum of Money would have given.

So a rent payable in terms of the average annual consumption of provisions by a man, or its equivalent in Money, would, while still utilizing Money in all its legitimate functions, secure both parties against fluctuations of the value of Money, and therefore against fluctuations of the value of all other commodities except those provisions included in the average. In the average annual consumption of provisions by an adult, if it could be obtained, we should have at least fixed a definite portion of utility, whose steady relation to population is to a certain degree a guarantee of its permanence in average value in exchange with other commodities.

By enlarging the sphere of consumption upon which to base this average, and taking in the consumption of certain classes of population or of an entire nation, we still more nearly attain a measure of the value of Money, and a guarantee against the evil effects of its fluctuation.

By selecting from the total consumption of a nation the greater number of certain commodities, the demand for which is general and constant, and fixing their relative importance in the calculation of the result, with a view to the total consumption of them, an arbitrary but approximately accurate "Standard of Desiderata" could be formed, the exchangeable value of which in Money would give a still more secure and permanent Standard of Value.

The idea of such a standard, foreshadowed in the writings of English students of Agriculture and Prices of the last century, appears to have first obtained full expression in a Reference Table of Values published by Joseph Lowe, a Scotch merchant, long resident on the continent, in his work on the "Present Condition of England." (London, 1822.)

The estimation in which the work was held may be judged by the fact that it was republished in New York in 1824, and in Leipzig, in German, in 1823.

It is a melancholy reflection, that fifty years after the publication of this work in England, in Germany, and in the United States, educated men, nay economists, may still be found whose knowledge of the nature of Money is barred by the doctrine, that being

itself "the Standard," its own value is not a profitable subject of inquiry.*

*Signal examples of the prevalence of this undeveloped stage of theory are given in late utterances in various journals in the United States on this subject. For instance, I find a late letter from a gentleman well and favorably known to the readers of the "New York Evening Post" as a fertile and acute writer upon economical questions (Mr. J. S. Moore, who has written also under the signature of "The Parsee Merchant"), in which certain questions proposed by the Silver Commission of Congress are treated in the following manner (See Weekly Post of Oct. 27, 1876):

"Question 2.—What percentage or portion of such change do you attribute to a fall in Silver, and what portion to a rise in Gold?

"Answer.—Now this question is the great hobby of my good friend Senator Jones Sahib. But really there is no Bonanza in it at all. The plain answer is, Gold is the Standard, and is fixed; it has risen in relation to Silver simply because Silver has fallen. But I will be more explicit in respect to this question by answering the next, which is:

"Question 3.—By what process of reasoning or deduction do you arrive at the conclusion given?

"Answer.—My process is very simple. Gold is the yard-measure, while commodities are the stuffs to be measured. Now, if I measure to-day a piece of cloth, and find that it contains fifty yards, and remeasure it to-morrow, and find that it contains only forty-nine and a half yards, and both day's measurements are right, surely it is the cloth that has shrunk one-half a yard, and not the yard-measure that has increased in length one per centum."

The gentleman is evidently right when he says his process is very simple. (See Appendix D.) Unfortunately, such treatment, although not so intended, seems calculated to strengthen the misunderstanding on this subject so curiously prevalent among bankers and business men.

It is a curious fact that a clean-cut explanation of the nature of Money as a standard has been on nearly every "gentleman's library" for generations. Pufendorf observes that "in the case of a change of price of one and the same thing, a distinction must be carefully drawn as to whether, properly speaking, the value of the thing itself or the value of money has changed. For the first happens when the relative abundance of money remains constant (*persistente eadem pecuniæ copia*), and the commodity in question becomes rarer or more abundant; the latter event occurs when the supply of the commodity remains constant (*persistente solito rerum proventu*), while the general supply of money is increased or diminished." (De jure Naturæ et Gentium, Ed. 1744, vol. V. cap. I, De Pretio, sec. 16.)

Pufendorf further cites Gothofredus' *De Mutatione et augmento monetæ aureæ*, which title seems to indicate that not merely one century, but several centuries, before the New York Gold Room was founded, the mutability of Gold had attracted special attention. In fact, in the barbarous days of Athens one Aristotle observed that "even money is liable to the same objections as other commodities, for it is not always of equal value; but, nevertheless it is more likely to remain firm."

But in 1876, apparently, Wall street can look at Broad street and say, "We have changed all that!"

This is all the more singular in the case of Germany, from the fact that the book was introduced to the learned public by a gentleman of distinguished position, both in science and in official rank.

One would suppose that a translation, with explanatory essays, by Chevalier von Jacob, Professor in Halle and former member of the Imperial Legislative Commission of Russia (1810–1816), would make a permanent impression: the more so, as his style is notable for clearness and energy.*

Lowe himself enumerates among the objections which might be urged against his scheme:

1. That combinations to influence Prices might be made with a view of affecting the calculation of the Table of Reference:

2. An injurious influence of the use of the Table on the price of land:

3. The fact that wages, fees, etc., are not included.

And he gives arguments to neutralize the force of these objections.

Von Jacob suggests as practical difficulties that he who uses Money in trade would, under the domain of this new Standard, suffer in the following manner: If general prices fall 10 per cent., and sugar remains stationary, a sugar-dealer who receives $90 instead of $100 in income (supposed to be interest on public debt), loses as far as his sugar business is concerned; and again, in general, that he who does not happen to use the articles which go to make what I have called the Standard of Desiderata in the proportion in which they enter into the Table, is to this extent a loser.

Hence Von Jacob remarks that while a permanent Measure can

* Von Jacob was the author of a Manual, or Principles of Political Economy. Introduction to the study of the Sciences of Government, Theory and Practice of Financial Science, on Russia's Paper Money, etc.

He was attracted, he states, "to Lowe's work by the ground taken, not only as to the injustice, but to the injurious effects of, and the lack of necessity for, the Suspension of Specie Payments in England."

"Until the appearance of Lowe's work," he says, "almost all statesmen and writers in England who have expressed themselves publicly, have declared that this measure, if not in general desirable, was yet necessary and unavoidable, to guard against the total destruction of the State."

"I have been bold enough," says Von Jacob, "to oppose this view in my paper on Russia's Paper Money and elsewhere."

In his translation of Lowe, Von Jacob contributes an essay of 54 pages on the Suspension of Specie Payments, in which the question is exhaustively discussed.

be found for individuals, it does not appear to him possible to find such a Standard for the needs of all, or even for those of families of similar occupations and means.

The objections are suggestive, although their cogency can be judged only in connection with the fact that Lowe's scheme, such as it is, if it can be put in practice, comes into competition only with existing Standards, whose utter variability and inadequacy are admitted.

The London Economist, in discussing Professor Jevons' chapter on the Tabular Standard of Value,* solves the puzzle of the effect of its adoption upon foreign trade and banking business, by declaring it incompatible with either. But even if this were to be admitted it is plain of course that, whether it be practicable or not to introduce into practice the use of such a Standard, the theory of it should be familiar to all who are supposed to understand Money. It is in fact the key to the entire Theory of Money.

The squaring of the circle, with which J. B. Say compared the problem of a constant Measure of Values, has never yet been achieved; but still it is well that mathematicians should understand the reason why it has not been achieved, and it is of practical importance that approximations should be made to the desired, but unattainable, result.

In the statement of the argument for the Gold Standard, we have quoted in several instances from a work of M. Th. Mannequin;† although without giving him credit for the citations, the plan of that chapter excluding this idea.

M. Mannequin is one of the most ardent and incisive advocates of Unity of Standard.

It is but just to so enthusiastic an advocate of Gold Monometalism, and is peculiarly interesting in this connection, to adduce from his work the following words (p. 56):

"We must," he says, "accustom ourselves to the thought that Money is subject to sensible variations of value, and we ought to consider beforehand the means of avoiding as far as possible the perturbations which these variations may cause in the distribution of wealth. Such means can, in my opinion, only be found in the right stipulated beforehand *ad hoc*, or secured by a special law, to

*See Jevons' Money and the Mechanism of Exchange, Chap. XXV., A Tabular Standard of Value.

†Mannequin, La Monnaie et Le Double Etalon. Paris. 1874.

revise those contracts, whatever they may be, the length of duration or binding nature of which * expose one of the contracting parties to the inconveniences of variations of Money. With good faith, with the assistance at hand of an equity court, such revision would not be difficult."

M. Mannequin's idea of a general Revision of Contracts suggests, at first glance, the plans for scaling of debts, which occupy so prominent a place in the History of Money.

The claim for such a revision of private contracts, as M. Mannequin would provide for by law, was, for example, put forward in the petition of C. B. Thompson, presented to the British Parliament in 1823 by Lord Stanhope and Lord Folkstone. The demand for relief was based on the ground, that Legislation having produced the rise in the value of Money, it was but just that the Legislature should provide a remedy for the distress itself had caused. Indeed one might add that the British Resumption Act of 1819, which ordained payment of the debt at a small discount, in case the deb or chose to demand payment within certain times, was in a manner a legislative recognition of the duty of government to guard the citizen against fluctuations of price.

The various Acts of the American Colonies in the spirit of repudiation, and again those of Russia, in 1812, 1843, and 1862; the propositions of scaling the debt, or debasing the Coin, made in England at the period of Resumption, and not by any means unknown in the discussions of the past ten years in this country, have in one aspect the same moral justification in kind, though not in degree, which M. Mannequin would call upon for his Revision of Contracts.

In either case, the fulfillment of the letter of the contract, or payment of the debt in full, would have disorganized Prices; would have caused a general perturbation in the distribution of wealth, and hence would have ruined some, and benefited others, without fault or merit of their own.

But there is a radical difference between the ideas of Mr. Lowe and M. Mannequin and these schemes for scaling a Paper-Money Debt. Equity is of course a secure foundation for the demand for legislation tending to secure stability of Prices: and, other things

* It should be observed that although M. Mannequin's expressions seem to point to a different idea, yet in fact all time contracts would have claims for revision; for where debts are measured in thousands, a fluctuation of a fraction of one per cent. is a matter of importance, certainly to the loser.

being equal, the *status quo* of Prices at the time the Act is passed has rightful claims for recognition, as the level whose maintenance in the future is desirable.

But "other things are not equal" when prices in false Money are compared with prices in real Money. This Equity, always applicable to real Money, applies only to Paper Money in its character as a circulating medium. But Paper Money is more than a mere circulating medium—it is a debt.

And debts must be paid in full. Bankruptcy or Repudiation are the other alternatives. Debts must be paid, even if Prices be thereby disorganized. The Equity of preserving the existing Instrument of Valuation and Means of Payment must be sacrificed to avert the iniquity of Repudiation.

Acute advocates of Paper Money have much to say in favor of the theory that a Greenback passes current, not because it is a promise to pay a dollar, but because the receiver knows that the people he purchases from will take it in payment.

The fallacy will be apparent on comparison with the reasons why Metallic Money passes current, or with such a statement as the following: "I respect Dr. A as a Doctor, but not as a man—I conclude therefore that if the man A were abolished, the Dr. A would remain."

In the case of a fall in the value of Money, this Revision of Contracts proposed by M. Mannequin would prevent that "impairing of the obligation of contracts" which is one of the almost inevitable consequences of forced currency of promissory notes.

But what principle is to determine this readjustment? By what rule is this Court of Equity, to which M. Mannequin would have the parties appeal, to be guided in this scaling of debts? Evidently Equity, or that equality which is the central idea of Equity, demands that the Average of General Prices shall be the guide.

Now, it is evident that if we suppose a wise discrimination in the importance accorded to the different articles whose Prices are to be reckoned in making up this average, the Court will be led to the very Standard of Desiderata of which we have been speaking.

The Tabular Standard of Value and this Revision of Contracts are therefore different forms of the same idea.

It should be clearly understood, of course, that the scheme implies that while one or both of the Precious Metals are retained as the Means of Purchase and as the nominal Instrument of Valuation, and while definite amounts of them remain the general Units

of Account, and while their position as a Means of Payment is not disturbed at all, yet that cardinal Function of being the last resort in measuring Values is eliminated from other Functions of Money, and the real responsibility of this Function is transferred from the single commodity, Gold or Silver, or the two commodities together, to an artificially compounded multiple body of commodities. In this view the ultimate Measure of Values of the future will then be not so and so much fine Gold, or fine Silver, but convenient fractions of a conglomeration of definite amounts of a multiplicity of commodities. *

But how does this "Multiple Legal Tender theory" comport with the dogma of the Unity of Standard?

Of course if such a Standard as that above described were enforced by law, Gold and Silver might be left to find their level, and there might then be neither Single nor Double Standard.

It would seem therefore that M. Mannequin, in admitting the Revision of Contracts, has severed the root of his argument for the Single Standard; for his argument is drawn from "the nature of metrical things," and presents Money as the analogue for wealth of the yard, the pound, the bushel, in length, weight, space; in other words, as a "definite quantity of wealth," as the yard, pound, or bushel are definite quantities of length, weight, and space.

If this be correct, certainly Money is nothing if not a measure. And if it be really a measure, why should contracts be revised?

* While believing the expression "Instrument of Valuation" a very useful one in the classification of the Functions of Money, I mean no disrespect to those time-honored words "Standard" and "Measure of Value." Like wine, "they are good creatures if they be well used."

We say of the Golden Sun and of the Silver Moon that they rise, pierce the clouds, veil themselves, retire to rest, etc., without thereby admitting the material presence of Apollo or Selene.

Compare statement of the Functions of Money, pp. 4-6.

Since that statement was printed, it has come to my notice that Wolowski, who, as I had of course known, lived in avowed and glorious rebellion against the fallacies of Metrological Money, had suggested the word *évaluateur* in the place of *étalon*, so devoutly proclaimed by Chevalier. (See his Letter to Alfred Latham, Esq., a Director of the Bank of England, 1867, in Wolowski's L'Or et L'Argent.) I have learned also that M. Joseph Garnier has suggested *valorimètre* as an appropriate substitute.

I need hardly add, that such countenance as this has marvelously brightened and relieved the loneliness of heresy.

The question, "What's in a name?" will naturally, of course, suggest itself, and surprise may come that such matters are deemed of importance; but hardly to the mind of one who knows how men's lives have been laid waste by fallacies that have their dens in household words. See Appendix E.

CHAPTER V.

THE SITUATION IN THE UNITED STATES.

Statement of the Public Debt—State, Municipal, and Railroad Bonds—Amount of Paper Currency—Amount of Specie in the Country—Prices in 1859, 1860.

STATEMENT OF THE PUBLIC DEBT FOR SEPTEMBER, 1876.

	Amount Outstanding.	*Interest.*
Debt bearing interest in Coin—		
Bonds at 6 per cent	$984,999,650	
Bonds at 5 per cent	712,320,450	
Total debt bearing interest in Coin	$1,697,320,100	$26,812,436
Debt bearing interest in Lawful Money	14,000,000	105,000
Debt on which interest has ceased since maturity	2,738,530	187,086
Debt bearing no interest—		
Old demand and Legal Tender Notes	368,561,472	
Certificates of Deposit	34,520,000	
Fractional Currency	29,858,415	
Certificates of Gold deposited	29,777,900	
Total debt bearing no interest	462,717,788	
Unclaimed interest		21,704
Total debt to date	2,166,776,418	27,126,227
Including interest not demanded		2,203,902,645
Amount in the Treasury—		
Coin		$64,591,124
Currency		12,524,945
Special Deposit for Redemption of Certificates of Deposit		34,520,000
Total		$111,636,069

The nominal amount of outstanding State Securities is about $385,000,000; of City Securities, $543,000,000; of Railroad and Canal Bonds, about $2,170,000,000.

Of the National Bank Notes there were outstanding, October 1, 1876, $322,253,554.

There were at the same date $21,860,943 of Greenbacks on deposit with the Treasurer for the purpose of retiring Bank-notes.

The statement for October 1, 1876, gives, deducting the latter item, $668,887,351 as the available circulation at that date of Greenbacks and Bank-notes.

Besides these, the Gold Certificates may serve as circulation, and

amount to $29,977,900; Fractional Currency, $29,758,415: giving thus a total of Bank- and Public Credit serving as Money, $728,-421,666.

Of the amounts of Specie in the country, widely varying estimates are made.

Dr. Linderman, the Master of the Mint, in his report for 1876 estimates the total amount of Specie in the country at $145 millions, including 15 millions of subsidiary Silver.

Others estimate the amount as much greater, Mr. Young, chief of the Bureau of Statistics, giving $280 millions (¼ Silver), a writer in the Banker's Magazine (May, 1875), from $215 to $265 millions.

These estimates are of course controlled by varying opinions as to the amount of Specie hoarded—the latter gentlemen giving 150 millions as a maximum estimate.

It must, however, be remembered that the Americans are not a hoarding people; that the stock on hand, when Specie went out of circulation, was not very large, and more than this, that small Notes of one, two, five, and ten dollars were everywhere current, and that the business of the agricultural population was chiefly done with notes, and that there was little or no Silver of full weight in existence, except a limited quantity of foreign Silver, including that brought by emigrants, and the Spanish and Mexican Dollars once current.

What amount of half and quarter Eagles are likely to remain in old stockings after eleven years of speculation and of peace?

Again, it must be remembered that as an element of importance in the question of Resumption, the average amount of Specie that will come out of these hoards into circulation is chiefly to be considered.

The writer before cited estimates that $85 millions, out of $100 to $150 millions, will become available.

On the grounds above suggested, if one were called upon to hazard an estimate, it would seem that to say $10 millions would be nearer the truth.

No details appear to have been given by Dr. Linderman in his Report; but the items may be approximately stated, as follows:

Treasury of the United States	$65,000,000
Metallic Currency, Pacific States	10,000,000
Subsidiary Silver issued	15,000,000
Specie in Banks	30,000,000
Hoards Bullion in hand, etc.	20,000,000

Of the above, about $30 millions are actively present in the currency by the Certificates of Deposit based upon them; while it should be remembered that Specie current in the Pacific States will be but to a slight degree available to take the place of Paper.

Of the condition of Prices, no carefully prepared Statistics have come to my knowledge.

The following table of average wholesale Prices in New York City before the Rebellion may, on comparison with the averages of Prices in the same market, in 1875–6, serve to indicate the state of affairs to those who can form a judgment on the latter subject.

I have, however, no knowledge of the principle followed in the computation of these averages, nor to what extent the intrinsic qualities of the various articles mentioned would correspond with what would go under the same name now.

I append this table merely as a suggestion in case a reader should desire to make a "bold attempt at an approximate estimate" of the comparative value of Money in 1859–60 and in 1875–6. It would be an inestimable service to the future of Applied Economy if some American thinker could bring the methods of Jevons or of Laspeyres to bear upon such questions in this country:

[From "Hunt's Merchants' Magazine," February, 1861.]

YEARS ENDING JANUARY 3, 1860 AND 1861.

	1859.	1860.
Ashes—Pots, 100 lbs	$5 12½	$5 00
Pearls	5 37½	5 00
Breadstuffs—Wheat Flour, State, bbl	4 30	5 35
Wheat Flour, Best Extra Genesee	7 50	7 50
Rye Flour, Best Extra Genesee	4 00	4 00
Corn-meal, Jersey, bush	3 90	3 15
Wheat (average of four kinds, $1.45 to $1.50), bush	1 47½	1 45
Rye, Northern, bush	92	75
Oats, State, bush	46½	37
Corn, Old Western, bush	90	72
New Southern, bush	88	72½
Cotton—Middling Upland, lb	11	12¼
Middling New Orleans, lb	11⅜	12⅝
Fish—Dry Cod, qtl	4 50	3 50
Fruit—Bunch Raisins, box	2 52	1 75
Currants, lb	6	4½
Hay—Shipping, 100 lbs	1 00	90
Hemp—Rough American, ton	145 00	152 50
Hops, lb	16	25
Iron—Scotch Pig	24 50	21 00
English Bars	53 00	52 00
Laths, per M	2 00	1 30

YEARS ENDING JANUARY 3, 1860 AND 1861—*Continued.*

	1859.	1860.
Lead—Spanish	5 65	5 25
Galena	5 77½	5 50
Leather—Hemlock Sole, Light, lb	30	19½
Oak Sole, Light, lb	30	27
Lime—Common Rockland	75	75
Liquors—Brandy, New Cognac	3 00	3 00
Domestic Whisky	26	19¾
Molasses—New Orleans	53 00	37 00
Naval Stores—Crude Turpentine, bbl	3 43¾	2 75
Spirits Turpentine, gal	44½	35
Common Rosin, N. C., bbl	1·65	1 25
Oils—Crude Whale, gal	52	51
Sperm	1 40	1 40
Linseed	57	50
Provisions—Pork, Old Mess, bbl	16 37½	16 00
Pork, Old Prime, bbl	11 75	10 50
Beef, City Mess	9 00	6 00
Repacked Chicago	9 50	9 00
Beef Hams, Extra	14 50	14 00
Hams, Pickled	9¼	8
Shoulders, Pickled	6½	5½
Lard	10½	10⅜
Butter, Ohio	16	14
State	20	18
Orange County	24	22
Cheese	11	10
Rice, Good, 100 lbs	4 20	1 60
Salt—Liverpool Ground, sack	1 15	75
Liverpool, Fine Ashton's	1 95	1 60
Seeds—Clover, lb	8½	8¾
Sugar—Cuba, Good	7¾	6¼
Tallow	10½	9¼
Whalebone—Polar	90	88
Wool—Common Fleece	40	30

The amount of Specie in the United States at various times has been estimated as follows (Tooke-Newmarch, History of Prices. II., 2, 718):

1820	$35,890,000
1849	142,022,550
1854	246,942,600

Note to Table of Prices.—It must of course be admitted that the obstacles in the way of ascertaining the value of Money in this country are out of all proportion greater than in England.

The value of Money in London may fairly be supposed to represent the value of Money in England, while the rapid growth, inequalities of transportation, vast extent of this country, and absence of a central market, exclude the averages of prices in any one American market from being a proper criterion for the whole country.

Note.—The statement of Public Debt and Circulation in this chapter are from the *Financial and Commercial Chronicle* of New York.

Mr. Chase is said to have estimated the amount of metallic circulation in 1861 at $270 to 300,000,000.

The mean rate per capita for 1861 would therefore give for 1879 about $450 million as the total Specie to be in use.

The main features of American Monetary Legislation have already been suggested in other parts of this Essay, while to most Americans the present state of the question in the political field is sufficiently familiar.

It may, however, not be amiss to insert a few words of explanation on this point.

Until October, 1875, when the contest of Inflation against Sound Money was fought out in the elections in Ohio, the future was darkened by the portent of Greenback Inflation. The defeat by the Republicans, under the lead of General Hayes, of a party which (at least in Ohio) combined to a degree interesting to a student of history, the features of the Birmingham school of early days in England, and of the Communists of Paris, seemed to promise to the country freedom in the future from the Inflation heresy.

Since the defeat of Governor Allen, the discussion of the Currency Question has been permitted to occupy a higher plane.

The attempt of a party in the House of Representatives to repeal the Resumption Act proved ineffectual, and the Restoration of Silver became one of the questions of the day.

Unfortunately for the prospect of a wise solution of the problems before the country, politicians in the House of Representatives, well known to the country as advocates of Inflation, having been defeated in the attempt to rule and ruin with Paper alone, seized upon Silver (then to the minds of the masses under a cloud) as being the next most "depreciated" and at the same time available instrument of exchange—apparently in the idea that this historic metal would lend itself passively to their schemes.

On the other hand, in the Senate the question was broached in less questionable form, and by men of different caliber. Senator Jones, of Nevada, whose sound position on the subject of Money had, in 1874, attracted the attention of the country, made the question of Resumption and the Double Standard the subject of exhaustive discourse. His speeches on the subject are landmarks in American Monetary Debate.*

* See Resumption and the Double Standard, delivered April 24, 1876: Washington: McGill & Witherow, 1876. I should make more detailed mention of this work, but that it came into my hands after my general conclusions had

The question, as presented to the Senate, was, I believe, confined to the propositions of retaining the old Silver Dollar as full Legal Tender, and that urged by Senator Sherman and others of limiting its Legal Tender quality to, I think, twenty dollars in one payment.

In the meantime, in the presence of the decline of the Gold price of Silver, the policy of coining Tokens for change was pursued by the Government.

The Treasury of the United States even purchased German Silver in London, and the demand for subsidiary coinage in this country was naturally potent in checking the decline in its Price.

By coining Silver promissory notes, and with them redeeming Paper promissory notes, the United States interfered to protect Germany and England from the effects of that infraction of the "law of nature and of nations," of which their demonetization of Silver had made them guilty.

To the United States the coinage of Silver Tokens naturally gave "protection" to the Silver interest, and was gladly accepted by the people as an augury of the feasibility and probability of Resumption.

As a practical outcome of the debate in Congress, a law was passed appointing a Commission of Members of both Houses (who were to choose three members outside of Congress to assist in their deliberations) to take into consideration the entire question of the methods of Resumption, and to report on or before the 15th of January, 1877.

The members of the Commission appointed on the part of the Senate were Mr. Jones, of Nevada; Mr. Boutwell, of Massachusetts; and Mr. Bogy, of Missouri.

Those on the part of the House of Representatives were Mr. Gibson, of Louisiana; Mr. Bland, of Missouri; and Mr. Willard, of Michigan.

Hon. William S. Groesbeck, of Ohio; Mr. A. Delmar, of New York; and Prof. Francis Bowen, of Harvard University, were subsequently chosen as expert members of the Commission; and Mr. George M. Weston, of New York, was made Secretary.

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been formed, and when I was desirous of assuring the correctness of my positions by such argument and analysis of counter-arguments as were not likely to be already familiar to American readers.

CHAPTER VI.

THE MORAL QUESTIONS INVOLVED IN THE MONETARY POLICY.

1. The Bonds of the Government and the Greenbacks regarded as a Debt.

What was Lawful Money of the United States in the years 1862–65—The Paper Money as a means of payment of the Bonds—The Act of 1869—Payment in Coin, and the agitation in favor of the Gold Standard—Payment in Silver before 1873—The nature of a Money Contract—Commodity *vs.* Purchasing Power—Delivery of the specific commodity necessary—Reservation implied in Sovereignty of State—Alteration of Monetary Systems—Notice to contracting parties—Fluctuations of Purchasing Power of Gold and Silver—Historical position of Silver—Coinage Acts of 1873-4—Estoppel by removal of Legal Tender character—Restoration of the *status quo ante*—Reduction in value of Bonds working an estoppel—Modes of restoration of Silver—Acts to strengthen Public Credit—A Measure of Payment and Means of Payment distinguished—Payment of Greenbacks as a debt—Depreciation of Silver.

2. The Lawful Successor of the Greenback.

Duty of Government to provide a good Metallic Currency—Danger of maintaining Gold Standard—Dangers of restoring Silver—Probable and possible action of European Powers—Analysis of Money—Its Functions, material and non-material—Money as the basis of a conception of value—Instrument of Valuation *vs.* Measure of Value—Function of Money as a Means of Payment—As a Means of Direct Purchase—As a Means of Transporting Value—As a Means of Preserving Value—Distinction of Functions which regard the peculiar interest of proprietor of Money, and those which do not—The ideal Medium of Exchange—Portability, and its practical importance—Influence of Instruments of Credit—Value of Money, and average of Prices—Variability of Prices—Problems arising in calculation of averages—Alterations of supply of Metallic Money—What is a normal increase of stock on hand—Effect of rise or fall on Money in its different Functions—Effect of steadiness of average value—Dangers of alterations of value proceeding from alterations of supply—Effects of rise and fall compared—Opinions of J. R. McCulloch, Roscher, and Chevalier.

1. THE BONDS OF THE GOVERNMENT AND THE GREENBACKS REGARDED AS A DEBT.

The Bonds and the Greenbacks were promises to pay dollars. They were originally issued between 1861 and 1865.

What were these "dollars," which by these instruments the Government promised to pay?

(I exclude of course from the following considerations those Bonds which were expressly made payable in Gold.)

The Gold Dollar and the Silver Dollar had, since 1792, formed the Double Legal Tender of the United States. Comparatively little Silver had come to the Mint, however, since 1834. In that year the Gold Dollar was reduced from 24.75 to 23.2 grains fine Gold, which was equivalent to establishing a relation of 1 to 16

in place of the original ratio of 1 to 15. But 16 ounces of Silver being worth more in the market then than 1 ounce of Gold, it became profitable to export Silver and to import Gold, and the latter naturally assumed the chief place in our currency.

The decline in the value of Gold, consequent upon the Gold Discoveries subsequently exposing the country to the danger of losing its Silver change, [for the dimes, quarters, etc., being coined of full weight, had, though in large part worn, become worth more than Gold at the rate of 1 to 16], a law was passed, in 1853, ordering the coinage of Silver tokens for change, whose paying power was limited to five dollars.

The Silver Dollar still existed, however, and still retained its character of unlimited Legal Tender.

Beside these, there was the Greenback itself, the paper promise of the Government to pay dollars, which the statute had elevated to the dignity of being itself a dollar, by declaring it to be "good and Lawful Money and Legal Tender for all debts, public and private, except duties on imports and interest on the public debt."

At the close of the war there were then three Legal Tenders, in which, as far as the statute expressly indicated, the principal of the Bonds was payable—Gold, Silver, and Paper.

As for the Paper Legal Tender, it was, in spite of the statute out of the question as an honest means of payment of the Bonds.

Had the notes of the Government been convertible at their face value into Coin, it would have been a mere question of convenience whether the debt was to be paid in Paper Money or no, just as it would be to-day with payment of debts of the English Government by Bank notes. But, unlike English Bank-notes of to-day, the notes of the Government were past due and depreciated in value, and when a powerful party urged the Government by additional issues to depreciate them still further, it became desirable to allay the distrust of those whose aid was necessary for the re-funding of the Bonds, to stop the mouth of treachery among the politicians, and to bind the country by a solemn public Act to payment of the public debt in Coin. This was done in 1869.

It is important to observe that this Act followed the International Monetary Conference at Paris, at which an enthusiastic Gold-monometallist had been active in representing the supposed interests and aspirations of the United States.

It followed also the discussion of the Gold Question in Congress, which had drawn this country into that wide circle of debate on

adopting the Single Gold Standard, which public bodies and thinkers in Europe had already formed.

The declaration that the principal of the public debt was to be paid in Coin was, therefore, notice to the world that, in spite of all that had been said, in spite of the promise held out to Americans by certain ill-informed advocates of the Single Gold Standard that its adoption was a "colossal speculation" for America, and although Silver was still at a high premium over Gold, yet the American Union proposed to retain her privilege of paying her debts in Gold or Silver as she should choose.

Such, then, was the situation up to the passage of the Coinage Acts of 1873–4.

Was there anything in the situation up to this date which forbade the Government to pay in Silver, supposing Gold should rise or Silver fall across the line of the legal relation of the metals as Money, to an extent which should make it desirable to the Government to use its option so to do?

The ground for full answer to this question must be found in the doctrine and in the history of Money.

A Money contract, in the strictest sense of Money, is a contract for the delivery of a certain commodity.

This is emphatically the expression of the theory of Metallic as opposed to Paper Money. It is with this argument that Greenback Inflation has been suppressed.

The law, nay, justice, as it is recognized, knows no considerations of the Purchasing Power of Money at different times, any more than it does of the amount of gain on one side or loss on the other, which the fulfillment of other contracts supposes, provided, of course, that there is no incapacity of the parties to make a contract, and that no fraud or mistake intervenes.

There can be no general implied guaranty against loss to one who invests in land, or horses, or wheat, and there is no guaranty against loss from an agreement to deliver certain amounts of Gold or Silver. Each party must run his risk. It is safe to affirm this *jure gentium*, by the law common to all nations.

This subject ought to be clearly understood in this country, for it is one upon which a battle of discussion has already raged, and which is also in many respects a mere repetition of discussions which took place in England after the wars with Napoleon.

Paper Money was issued upon inflated prices, and hence the

amount of Purchasing Power was small. The Bonds sold for but a fraction of their face value in Gold or Silver.

Currency and public debt had stood in much the same position in England. Both in England and in this country ambitious demagogues strove to find support for their plea that the small amount of value received by the Government was a defense to the literal fulfillment of its contract.

They failed in England, and have failed here. It is plain that the contract was made by a party capable of contracting, and that the discount was in consideration of the risk which the lender assumed, and neither party can take advantage of the condition of prices.

The Government can not plead failure of consideration.

The contract calls not for an equivalent of the Purchasing Power of the Bonds or Greenbacks when issued, nor even the Purchasing Power which the quantity of Gold or Silver they promised to pay could command at the time they were issued, or was then expected to command at the time of payment; neither of these did the contract call for, and neither of these did the Government aim to pay.

It recognized that it was bound at the proper time to deliver to the proper party the commodity named in the contract.

It is true and most important in another bearing that (as has been shown in Chapter IV) the ideal of the economist is to have contracts made which shall be expressed in a real Standard Measure of Value; in other words, that men shall contract to pay Purchasing Power.

But they do not now so contract, nor did they in this case. For the present, therefore, a money contract is an agreement to deliver a certain amount of Money apart from all considerations as to whether this party or that party gains or loses.

It must, however, be clearly understood that this obligation is subject to an implied condition, necessitated by the sovereignty of the State which is a party to the contract under discussion.

It is included in the idea of sovereign power that the State may alter its Monetary System.* Now the debts of a State are payable usually in what legislation has made "Lawful Money:" yet the state can not be bound always to maintain the same Lawful Money, for the interests of the nation may require that some changes be made in metal or coinage, and the interests of the nation are paramount.

*See Chapter X.

There can be no question, for example, of the power of the British Parliament to change the system of pounds, shillings, and pence, just as in 1816, before Resumption, it changed the Double Legal Tender of Gold and Silver to the Single Standard of Gold.

Its duty to the public creditor is thus limited to providing him in the new, an equivalent of the former Lawful Money.* The Lawful Money of one time may, therefore, be not only of different value (we shall speak of this hereafter), but of different nature from that at another time.

Germany, for example, in changing from a Silver Legal Tender to a Gold Legal Tender, has changed not only value, but material, and contracts made under the domain of Silver are payable in Gold.†

Now, the business world had notice of these truths: of the nature of Money, and of Money contracts, and of the sovereign power of states in this regard. In fact, the last quarter of a century had been crammed with experience of the changes of Monetary Systems and in the relative value of Gold and Silver, and alterations of their Power of Purchasing commodities.

In this country a process had still earlier taken place, beginning in 1834, by which depreciated Gold had succeeded to the place of what may have appeared appreciated Silver.

We, too, had taken our share in that decline in the Purchasing Power of Gold after 1850, so lucidly analyzed by Professor Cairnes and Professor Jevons.‡

In this period Silver, too, had accompanied Gold, but was in its decline obeying Gold as the stronger metal, although it had not kept pace with its fall, and thinkers were anticipating a decline in its value, even beyond that of Gold.

Long before our Civil War, Chevalier had preached his crusade against Gold, and urged France to adopt the Single Silver Standard. Holland had abandoned Gold, and England had calmly seen her

* Of course it is understood I speak only of real Money.

† How to do this with the least possible shock to business—how to do complete justice in the matter—was a problem which German thinkers have earnestly labored with, approaching it both from the point of view of the jurist and the economist.

The main object is, of course, to avoid abrupt alterations of value of Money, and the difficulties of obtaining the various Legal Tenders in the right quantity, and at the right time.

‡ "Cairnes' Essays in Political Economy;" "Jevons' Serious Fall in the Value of Gold;" and Journal of the Statistical Society, 1865.

millions of Gold increasing in number while depreciating in value, and, while turning a deaf ear to the agitation for restoring Silver in order to avert this depreciation, the Government had reaped benefit, among other ways, by an annual gain (which amounted in the end to 30 million dollars for some years) on the interest of the national debt.*

If we consider what special reasons there were why men should anticipate that Silver would come again into use in this country, we shall find that to the commerce of the world the Silver Dollar had been a familiar coin for centuries. Gold and Silver had been recognized in the Constitution of the United States as alike fit material for Money, and like the Silver Franc of France, which French writers, Chevalier at their head, have been wont to treat as sacred, the Silver Dollar was recognized as the Monetary Unit of the coinage.†

It may be fairly said that the law of 1834, as well as the law of 1792, recognized that, in case of any change of the legal proportion between Gold and Silver, the Gold Dollar was the one to be enlarged or diminished, while the Silver Dollar remained constant.

The Bonds were sold in France, where the Double Legal Tender prevailed; in Germany, which supported the Silver Standard; and in England, where a return to Silver had been urged, to protect vested interests against the dreaded extreme depreciation in Gold. The Double Legal Tender remained. "the law" as much as it ever had been, and the experience of all countries had shown that advantage was certain to be taken of the option of paying in the cheaper metal. In fact, at that very time France and the United

* See Jevons' "A Serious Fall in the Value of Gold," 1863, p. 58. A Gold "depreciation of 9 per cent., which is quite the least I can believe to have occurred, must therefore have effected a reduction in capital of about £75 millions, and in the annual charge of nearly £2½ millions." This was in 1862. Twelve years later, the subsequent fall, added to that experienced up to 1862, is variously estimated, at about 15 to 20 per cent. Among others, Professor Fawcett, ("Manual of Political Economy"), 1874, p. 480, gives the fall as "not less than 25 per cent." He denies that the fundholders have any claim for compensation.

† It may be worth mentioning that the statute of Elizabeth, 1560, continued the Pound "sterling" of Silver in the position which it is presumed to have held since the migration of the "Easterlings" to Britain; and, as far as I have been able to discover, Silver gave, strictly speaking, as Monetary Unit, in Chevalier's sense, in England, till 1816, a lineal descendant of a primitive "*pund mere hwites seolfres.*"

States were both using Gold, because Gold was the cheaper.

If men never thought they could demand Silver when Gold was the cheaper, why should they expect to receive Gold when Silver is the cheaper?

In view of this state of the law and of the facts, it is obvious that in 1873, however low Silver might then have fallen as compared with Gold, and however difficult it might have been to obtain Silver Dollars, yet the delivery of a Silver Dollar was admittedly the full, fair, and honest fulfilment of the contract written on the Greenbacks or the Bonds.

Whether it would have been magnanimous or politic to pay in this way, is a totally different question. Our object here is, of course, simply to eliminate confusion of ideas as to this particular branch of the question. What is magnanimous and politic in us* can safely rest on its own merits, and does not require to be bolstered up by confusion with what is demandable by another party as a right.

We come now to the question, has the action of the Government in 1873–4, forbidding coinage of full-weight Silver, and taking away the Legal Tender quality from such coins if existing, estopped the Government from paying the Bonds in Silver?

If we look at the letter of the contract merely, we shall see clearly that as the Bond, or Greenback, was merely an agreement to deliver so and so much Gold, or so and so much Silver (stamped, of course, so as to become properly speaking dollars), the letter of the contract may be satisfied by payment in Silver or Gold Dollars, whether that Silver or Gold be Legal Tender or no. Hence, as far as the letter of the contract is concerned, payment might be made in Silver, in spite of its demonetization; but not according to the spirit of the contract.

This prerogative of being Legal Tender, which is conferred, whether upon Gold or Silver (or promises to pay them), by Legislation, creates a use and increases the demand for the bearer of the prerogative, and enhances its value, and so is "worth money." It is plainly an integral part of the consideration, and the Government having, by taking away this prerogative from Silver, diminished the value of Silver, can not take advantage of its own wrong.

Can this estoppel be removed? One may briefly answer—first,

* The reader will elsewhere find suggestions on this subject.

that if the restoration of the *status quo ante* on the part of the State be the sole object aimed at, it is plain that, as far as the Government is concerned, Congress can by law restore the Silver Dollar to the place it lost in 1873–4. If this be all that is worthy of consideration, a law making the old Silver Dollar full Legal Tender, and permitting or ordering its coinage, would remove the estoppel and legalize payment of the debts in Silver Dollars of 371¼ grains of pure Silver.

But there are other considerations. Bonds of the Government have been bought and sold since 1873–4, and the present holders may be said to have taken them on the faith of their being payable in Gold, and not in Silver, and as Gold is believed to be rising as well as Silver is falling, to pay the Bonds in Silver will bring to the Bondholders actual damage as well as diminishing their anticipated profit.

While we need not regard the *lucrum cessans*, the loss of anticipated profit, the *damnum emergens*, the actual damage, if it should occur, is a matter of importance, as affecting not merely public credit but national honor.

Whether such damage is likely to accrue from the re-monetization of Silver, as Congress may re-monetize it, is a question deserving the most careful consideration. There are numerous ways of restoring Silver in our money system, and it depends upon which of these ways be chosen whether the Public Debt be affected in one way or another, to this or that degree.

For example, no damage need follow the restoration of Silver, if such action be taken by the nations as to restore to Silver enough of that value which the demonetization of Silver has taken from it, to put it on an equality with Gold at the legal relation.

But, it will be asked, is this possible? Evidently it is, if the Western Powers decide to do it. And the possibility is being discussed in the Western World, and is being thought of still more.

The depression that has weighed upon Europe for the last three years has suggested to many minds in Europe that the remedy is near at hand, simple, and beneficent. Germany seems to be resigned to retaining her hundred and more millions ($) of full-weight Legal Tender Silver,* while the situation of the British

* Dr. Soetbeer [Deutche Münzverfassung, III. Erlangen, 1876, p. 254] pronounces the estimate of 450 million marks as the amount Germany had for sale, early in 1876, as rather too low than too high. In addition to this, there is something near 95 million dollars worth of Silver for subsidiary coinage, only

empire in Britain and in India is so suggestive as not to require explanation.

To make a more moderate supposition.

If the Latin Union, Austria, and the United States should unite in making Gold and Silver, at the same proportion, unlimited Legal Tender, with free coinage, there might, perhaps, be no need of any further Act to strengthen public credit.

If, however, the "Dollar of the Fathers" is to be reinstated out of hand, the condition of the Bonds would demand special legislation to sustain the public credit, and such legislation should, of course, precede the restoration of Silver.

The difficulties in the way are those inherent in the delicate problems which the Value of Money presents. The questions, what is the measure of damage? how is the damage to be repaired? are both difficult of solution.

Supposing, then, for illustration, that concurrently with the restoration of Silver to its Legal Tender character (at whatever relation) an Act should be passed making the Bonds payable in Gold.

But Gold is rising in value. The only moral claim which the Bond-holder can substantiate is, as we have seen, that he shall not lose by having acted from 1874 to 1876 on the belief that his Bonds would be paid in Gold, and that the Value of Gold would be kept up by its being sole Legal Tender in the United States after Resump tion. The sovereignty of the Government disposes of the anticipation of profit based on the latter expectations, and the question then is reduced to this: Were the Bonds sold for so much more in consequence of the expectation that they would be paid in Gold, or its equivalent in whatever Lawful Money the United States should provide; that, to save the Bondholder from loss, it is necessary to agree actually to pay the Bonds in Gold? It might be asked, why not inquire what the percentage of loss is, and pay it outright? Again, it must be remembered that in the event of new Gold Discoveries the public creditor will lose by a fall of Gold, or, in the event of a falling off of supply or an excessive demand for Silver, will be prevented from gaining what he would have gained had the Bonds been payable in Silver alone.

It may be suggestive to observe that such event could be pro-

a part of which has been coined. Efforts seem to have been made (and I observe that in some quarters they have succeeded) to represent the stock as much smaller. Unfortunately for this policy, however excellent its motive, Dr. Soetbeer occupies a seat in the court of last resort in such matters.

vided for, if it were deemed best, by an Act ordering that whichever metal should be of the greater value (at the proportion contemplated by law) at the time of payment should be the measure of payment.

This would be the Double Standard, with the option in the hands, not of the debtor, but of the creditor!

Such Acts as these we have supposed are, it is safe to say, the strongest measures which public credit could demand.

Would the re-monetization of Silver conflict with these measures?

The following considerations will afford an answer to this question:

It will, I think, be admitted that there is no moral obligation upon the Government itself to mold legislation for the purpose of raising the value of the commodity in which it is to pay its debts.

If the Government is to pay its Bonds in Gold, and Gold is rising in value, it is hardly the duty of the Government to refrain from exercising the prerogative of sovereignty before mentioned, and still less is it its duty to interfere actively, in order to cause a further rise in the value of Gold. The ablest attorney of the most grasping creditor could not sustain such a proposition as this by convincing argument.

Now, to resume Specie Payment in Gold is to interfere actively to raise the value of Gold. Of course the policy of the Government in such matters must be determined by considerations of what affects the prosperity of the country, and it is to this end that the sovereign control over what shall be its Lawful Money must be exercised.

Suppose, then, that in the exercise of this power, the Government should demonetize Gold and elevate Silver to its place as the sole Lawful Money.

If its Bonds are payable in Gold, and Gold is not Legal Tender, how can it perform its contract?

How does Germany secure the payment in Gold of contracts made for Silver? By providing a substitute; by fixing a relation between the two metals, in accordance with which the terms of one are translated into terms of the other.

But it may be well said this is a dangerous power, and in view of the instability of the market relations of the two metals, such a measure may fail of justice, even if devised and carried out with thorough good faith, and that its application to the Bonds presents peculiar dangers.

Then, I answer, there is still another way which is not liable to these objections.

Gold alone, or Silver alone, or as provided in the second Act, which we have suggested, "whichever metal shall be highest in value at the time of payment" may be made the Measure of Payment, while the Means of Payment shall be whatever kind of Lawful Money can be most conveniently obtained by the debtor Government.

Let us suppose, for illustration, that Gold be the metal in which the Bonds are payable, and that under the Single Silver Standard, or under the action of the Double Legal Tender, Silver Coin be at the time of payment the only metal in actual circulation as Lawful Money.

Gold might be made then the Measure of Payment and Silver the Means of Payment, by making the Bonds payable in Gold "or its equivalent in Silver Coin at the market price at the time of payment."

There could be no objection to the "market price;" the creditor receives the Purchasing Power which was promised to him; the Government maintains its prerogative of ordering its monetary policy as the interest of the people demands.

Plainly, then, the re-monetization of Silver, if it be rightly conducted, need not conflict with the measures alluded to, and as these are the extremest measures of protection of his interests which the public creditor can rightly demand, the payment of the Bonds may be safely remanded to a secondary, although important position in the problem, what ought to be the Lawful Money of the United States after Resumption.

It is worthy of remark that to give the demand as far as it goes to the lighter metal throws its weight so as to assist in keeping the value of the two equal in the balance. It is not unimportant also to remember, in this connection, that the amount of Bonds to be actually paid by the Government in the next few years will probably be small. Resumption will consume the surplus revenue, and the chief object of policy now is to secure the reduction of the burden of interest by re-funding. With this in view, self-interest will counsel measures to "strengthen the public credit," which on other grounds would be unnecessary.

It is of course foreign to my purpose to attempt to discuss the rationale of Resumption itself. Indeed such an essay would, at any rate, be ineffectual, without considering the Paper Currency

in its length and breadth, and upon this I do not touch. In this chapter I desire merely to illustrate the nature of the obligation and the fulfilment of the Money contract which the Bonds and Greenbacks embody.

If the considerations here presented are correct, it is plain that while there should be no question but that the Government must take such action as to the Bonds as a nice sense of honor may dictate; and while it is politic also upon motives of self-interest to increase the value of the Bonds, yet legislation to these ends need not invade the proper domain of the Money Question. The Government remains free to adopt what metal or metals and whatever weight of Coins it may please.

So likewise the payment of the Greenbacks as a debt, is subordinated to the question, "what shall be the Legal Tender of the future."

The payment of the Greenback Debt becomes manageable when we remember that, apart from the ample means of settlement which is offered by funding in interest-bearing Notes at short time or in Bonds, the Government is at liberty to make offers, the acceptance of which by holders of the Greenbacks is an abandonment of the claim of other modes of payment, whether it be the old Silver Dollar that is offered or one containing more Silver.

The old Silver Dollar once re-monetized, and offered for redemption of Greenbacks, would at once absorb a large quantity of the Notes of the Government. The demand for payment in Coins of greater value would be silent, in the presence of the fact that as a debt the Greenbacks draw no interest, and that present payment in Silver is more desirable than future payment in Gold. No one questions the right of Government to withdraw the character of Legal Tender from the Greenbacks, and to arrange for their final withdrawal or redemption under proper regulations.

The existing depreciation of the Greenback excludes it from a claim analogous to that of the Bonds; that its Gold price having risen since 1873, would fall upon the monetization of Silver.

It is apparent therefore that the payment of the Greenbacks as a debt is subordinated to the general question, what shall be our monetary system after Resumption.

Of course no one familiar with the subject will be confused by the fact that the Silver Dollar has been quoted as worth less in Gold than the Greenback Dollar. If Silver were re-monetized, even by the coinage of the old Silver Dollar as Legal Tender, it is

safe to predict that it would rise above the value of the Greenback and approach the value of the Gold Dollar, and that the value of the Greenback would follow this rise in time, while the tendency of the change would be to check the rise or cause a slight fall in the Purchasing Power of Gold.*

As will be explained hereafter, in the future there may come a serious depreciation of Silver, after its restoration here, but not immediately.

2. THE LAWFUL SUCCESSOR OF THE GREENBACK.

We come now to consider the duty of the Government of providing a real Money, which shall fulfill the requirements of the business of the nation, and be a secure basis for prosperity in the future.

As will appear from a consideration of Chapters VIII and IX, the movement of the Western World toward the substitution of Gold in the place of Silver and of existing Paper Money, threatens, if persisted in, to produce a progressive rise in the value of Gold—a rise which need not spend its force during the preparations for, and consummation of, Resumption in the United States; but which, being almost entirely independent of action here, bids fair to make itself felt in the Western World for an indefinite period in the future.

On the other hand, the restoration of Silver in the United States to its former character of unlimited Legal Tender, *without concurrent restoration by other leading nations*, will, whether the ratio be 15½ or 18, if not at once, yet eventually, under not improbable circumstances, expose the country to the *dangers of a general and rapid depreciation*, as well as, immediately, to abrupt fluctuations of the value of its Money.

For example, such action on the part of Congress might, in due time, lead to a transfer of Silver from Germany to the United States, while, in return, the Gold now held in this country would pass to Germany, and thus enable her to complete her "Coinage Reform."

But in addition to setting free whatever Gold there may be in

* It is proper to admit that, in speaking of re-monetization of Silver, I have avoided discussing the practical difficulties of providing Coin The capacity of the mints enters of course as a most important element into the problem of the ways and means of Resumption, but could not profitably be discussed here.

the American Union to find its place in European currencies, the abandonment of Gold (for, if the United States are alone in this movement, the restoration of Silver might well have this meaning), would set at rest the apprehensions which weigh upon the market about the future demand for Gold for the United States.

That powerful party which has long agitated the countries of the Latin Union, with the aim of inducing them to abandon Silver, might, through the events thus suggested, gain strength to overcome the opposition to which the present embarrassing situation gives support. In that event, the Silver there held would be thrown upon the market.

In checking, by her new employment for Silver and her withdrawal of employment of Gold, the depreciation of the one and the rise of the other, the American Union would thus have promoted the interests of the world in general, but at her own expense; for, if thus left alone in the Western World to receive the surplus Silver of Europe, while Europe ceased to be a buyer of her share of the annual product, this country would, as I have indicated, be subjected to great danger of a rapid depreciation, and, in any case, would have to depend on the vicissitudes of Asiatic demand for help in moderating those tendencies to fluctuations in value, for which the elasticity which has accompanied the variety of currencies in Europe has hitherto given so effectual a counterpoise.

The influence of England, through her Empire in India, as well as by her general control of Asiatic commerce, might thus be exerted to the serious detriment of American interests.

To such a situation it would be but slight alleviation to know that Gold-monometallism was exposing Europe to dangers of perhaps greater magnitude.*

* In discussion with a friend some time since, a query was proposed as to what might be the effect of the restoration of the Silver Dollar, under Treaties for Bi-metallic Money without Fusion of Currencies, with the Latin Union and Austria, upon South American and Asiatic trade, and I was led to conclude that (of course apart from the question of the actual feasibility or other results of the measure) such measures would materially improve the prospects of our commerce.

It was therefore with considerable surprise that in a pamphlet, lately issued in England, I read the following passage, in a letter of Mr. Stephen Williamson, a merchant of Liverpool, engaged in the South American trade, on the "Depreciation in the Value of Silver," addressed to the President of the Liverpool Chamber of Commerce, dated July 20, 1876:

"It may have the semblance of disloyalty," says Mr. Williamson, "to tender

In view of these and similar possible alternatives, I propose, without discussing the ways and means of Resumption, but supposing Resumption already to have taken place, to offer a brief analysis of the Functions of Money, and their relation to a rise and fall of its value.

We can best, in this way, disengage the principles which should guide the Legislator in the difficult task of providing a stable basis of metal for the nation's business.

Money is then a material commodity, used under the guaranty of stamp or coinage of the state, as an Instrument of Exchange.

Its substance being regarded both as valuable in the present and secure of unremitting employment in the future, both for purposes of exchange and for use in the arts, the idea formed by men of the value of certain quantities of it becomes a convenient standard for mental comparison with it of the values of other commodities and of services, whether the persons making the comparison have any expectation that these commodities or services will be exchanged or paid for with actual Money or no.*

This computation is thus a process in the mind of an individual to whom the material commodity has supplied a conception: namely, that of a—to him—approximately definite value.

Money, therefore, beyond and above its use as a material Instrument of Exchange, supplies to man that idea of the value of a dol-

advice contrary to the good of my own country. But if the United States were able to buy up (even on loan) the depreciated Silver Currency of the Continental nations—to establish with France a Dual Standard, to make the Silver Dollar an unlimited Legal Tender, as the Silver Five-franc piece is in France, and as the Rupee is in India—she might ere long attract to herself, and away from us, nearly the whole of the South American, Mexican, East Indian, and Chinese demand for calicoes, twist, iron, and cutlery. France might participate largely in the residue. They might establish copper works at New York, Baltimore, and Havre that would be able to compete with Swansea and Liverpool for those supplies of the raw material which constitute two-thirds of the entire Copper now imported into Europe, and otherwise cause us to have a humbler estimate of our financial and manufacturing greatness. But I am aware that the very risk of such contingencies, carrying with them, as they would, the germs of permanent commercial declension, and, as a consequence, a material reduction in the value of all real property, will arouse our slumbering Statesmen and Financiers, and so prevent the national catastrophes which otherwise may befall us. The sooner they awake to a real and lively sense of danger, the better for England and for the World."

* In speaking of Money, I mean, of course, real Money, excluding Paper Money, subsidiary Coins, and other forms of credit.

lar, or pound, mark, or franc, which becomes, in his comparing and computing of values, the Unit of Prices, of Account, of Appraisement, of Investment.

This, therefore, is the non-material, the arithmetical, or numerical function of money; as the universal divisor or common denominator of values: a function which may be briefly characterized as that of an Instrument of Valuation.

But value itself is, of course, merely a relation between exchangeable or supposably exchangeable commodities; it lies entirely at the mercy of man, who makes, or may make, these exchanges, and man is himself at the mercy of events.

Time may bring change to the utility and to the value of the materials between which the relation of value is supposed to exist.

There can, therefore, be no permanence of accuracy in that computation of value which is implied in Prices, Accounts, or other uses of Money, as an Instrument of Valuation. An exchange actually made is not likely to be afterward exactly duplicated. The innate properties of the commodities compared, may remain the same, and the qualities of the number—ten, for example—are as constant as the universe; yet the value, or, in other words, the Purchasing Power of ten dollars of Gold or of Silver varies from time to time, and the value of ten tons of iron, ten bushels of wheat, ten acres of land, is even more unstable.

Each term of the comparison is thus elastic, and not only has a different length for different persons and places, but to the same person at different times. What determines what the "figures" shall be in Prices, Accounts, Appraisements, Investments? Evidently, they depend upon the relation in the mind of the Seller, Accountant, Appraiser, Investor between what happens to be, at the time the valuation is made, his individual idea of the value of a dollar and his individual idea of the utility of the commodities or services estimated. The division of labor, the multiplication of needs, and resulting increase of exchanges which characterize civilized life, have indefinitely increased the practice of computations of value, and hence arises an increasing importance of Money as an Instrument of Valuation.

Concurrently with this development of the use of Money as an Instrument of Valuation, another and distinct use of the material Money is evolved: namely, its Function as a Means of Payment.

The liquidation of obligations, which may arise from a variety of causes (as, for example, contract, laws or judgments of courts di-

recting payments, etc.), assumes a prominent position among the Functions of Money. The past, present, and future are bound together by a network of obligations, and these obligations are habitually expressed in terms of Money, and liquidation of them is demandable in metal. To the extent of fabulous sums total of Clearing Houses—indeed, of the entire credit transactions of the world—the material Money, which has supplied to the mind the various Units in which debt or credit are expressed, is (except where there is a Paper Legal Tender) also demandable *in corpore*, as a Means of Payment. Its use in this Function attains, therefore, immense proportions, and is subject to great fluctuations.

Second in the extent to which it gives employment to the material Money, though first in historical importance, is that portion of the activity of Money as an Instrument of Exchange which applies to the direct purchase of commodities. It is, in my belief, profitable to segregate this as a distinct Function of Money.

But, beside these uses, Money is largely used for the peculiar purpose of preservation of value, and this both in space and time. It is the accepted Instrument for the Transfer of Values from one place to another place. Again, as a hoard or Store of Value, or as an Investment (as, for example, where a court orders property converted into Money for safe-keeping) it serves to transmit to the future a value obtained in the past.

The uses of the material commodity, Money, therefore, may thus be classified :

A. A Means of Payment.

B. A Means of Direct Purchase of Commodities.

C. A Means of Transporting Value.

D. A Means of Preserving Value—

while, as the basis of a definite idea of value, it serves as:

An Instrument of Valuation.

As to A, we observe that payment being a present delivery of certain quantities of Money, determined upon in time past, this use of Money rests upon persons, in so far as they are debtors; and the extent to which Money is actually used in this Function depends largely upon the ability of debtors to obtain, at the proper time, the amount of Money stipulated for in the past.

As to B, it is plain that the Money used in this Function is primarily regarded as being in hand, although the idea of obtaining it is not far in the background.

In like manner, the Functions C and D look to the action and interest of one who is already a proprietor of Money.

To the fifth Function, on the other hand, all men, in various degrees, contribute their activity in computations of value.

It may also be well to remember that inasmuch as in the Functions A, B, and C Money must be transported, the smaller the bulk or the less the value is, with an equal weight, the more convenient will the Money be.

It follows, therefore, that, as regards the general Function of Money as a Medium of Exchange, which includes the three Functions just mentioned, if it were true that convenience of handling and carrying were the chief desideratum, then the greater the value of any special sort of Money referred to, the better it would be, provided the difficulty of obtaining pieces of smaller denominations for change could be met.

To use the words of Ricardo, "ten millions would be as effectual for that purpose as one hundred millions."

The same observation applies to the use of Money for hoarding, inasmuch as the smaller the bulk the greater will be the ease of concealment.

It is plain, then, that from the point of view of mere convenience (excluding for the time all other considerations), it would be well to have a metallic currency composed of a small quantity of Gold, the value of which should be indefinitely greater than it is at present; and, perhaps, an equal weight of Silver, the value of which should be so far inferior to that of Gold as to enable it to supply the need of Coins of convenient size and of less value than the smallest Gold Coin which can be conveniently used.

Of course, such Money can exist only in Utopia.* It is as impossible to establish such a system as it would be to build the upper story of a house first, leaving it in the air with nothing to support it.

The future must be built upon foundations of the past and the present. Now the past and the present command the field of discussion, by the existing stock of the Precious Metals; by the existing Prices in different countries, based partly upon Metallic, but largely upon Paper Money, and by the outcome of former Valua-

* Even if such a currency existed, it would be exposed to the same derangement of Purchasing Power, and relative values of Gold and Silver, which now disorganizes the business of the world; and the same questions must arise which we are now endeavoring to answer.

tions and Investments in the shape of outstanding obligations payable in Money.

In the presence of these great facts, convenience of handling and transporting seems dwarfed into insignificance.

This insignificance is only heightened by the further fact that paper Instruments of Credit, while their use tends to make Metallic Money fall in value, and hence to increase the weight of metal necessary for exchange with a given value, yet have also, in practice, constantly tended to supply the place of Money in such a way as to reduce to the minimum the actual handling and transporting of metal, and have, therefore, likewise reduced to the minimum the importance of this mere convenience or portability.

Returning then to the general questions of Value, we observe that from existing Prices in a given time, in a given country, an average of Prices may be constructed which conveniently measures the average value of Money at that time and place.

Our main question is then as to the effect of a rise or fall of this value, manifesting itself in the various Functions of Money, and their respective influence upon National Prosperity.

But, first, a word of explanation as to Prices:

It is of course understood that variability is an innate characteristic of Price; and albeit the fluctuations of different commodities tend to balance each other in the calculation of an average, yet a certain degree of variation, possibly periodic variation, in the averages of Prices, would seem inevitable.

For an average extended over a considerable period of time, a greater degree of steadiness would seem attainable.

In the calculations of such averages, a series of perplexing, if not insoluble, problems arise, whose existence, added to the inaccuracy of statistics, compels an admission that the results can only be approximately correct.

Fluctuations of Price are of course producible by a variety of causes, beside that increase or diminution of the supply of metal for Money, to which our attention is directed in this chapter.* Each commodity has its own vicissitudes of demand and supply, and the alterations of cost of production—for example, a very good

*Indeed, in the case of a Credit Currency, expansion might coexist with a fall and contraction with a rise of Prices. This subject has been lately discussed with accustomed insight and clearness by a distinguished thinker, Mr. B. F. Nourse, of Boston, in a paper on "Currency and Prices," recently read before the Amer. Social Science Association.

or very bad harvest, a labor-saving invention, etc.—introduce a disturbing, though generally wholesome, element into the problem.

Confidence or apprehension, acting upon Credit Exchanges and Coin Exchanges, as wind may act upon a mass of clouds, enter also as factors into the problem.

But making all allowance for the seemingly irresponsible laws of Price and for cost of production, *deductis deducendis*, it still remains true that a marked change in any given *status quo* of supply of metallic Money does, sooner or later, albeit by tortuous and hidden paths, tend to affect the average of Prices, making Prices higher as Money increases in amount, lower as it diminishes.

To illustrate: it may be said that alterations of the supply of Money tend to affect prices, as an increase or diminution of the force of gravitation would affect the movements of bodies, animate and inanimate, on the earth.

In speaking of a rise or fall in the value of Money, I refer simply to such as are caused by an increase or diminution of the supply of the metals used as Money, beyond or within that annual increase of supply which may be taken as normal, and I exclude all other causes from consideration.

But what is the normal demand? The question is a difficult one. As man is constituted, one may say that population ought to increase, and wealth ought to increase, and hence a certain percentage of increase of Exchanges may be assumed to be "normal."

It is plain that opinions are likely to vary upon these questions, and that the best opinion is a very indeterminate solution of the question.

Until I gain further light, I shall be content to define it as that supply which will keep the General Average of Prices constant.

In considering the effect then of such changes upon the action of Money in the various Functions above set forth, we observe that as an Instrument of Valuation it is equally disturbed by a rise as by a fall. Any change in the value of Money tends to confuse the mind of him who makes the computation of value; and as the thought of the future is constantly active in the present computation, the disturbance is complicated by additional uncertainty.

Of course men could accommodate themselves to a less or more valuable Unit of Account, of Price, of Appraisement, if they started with *tabula rasa*—if there were no old Prices and Valuations sensibly to affect their interests in present or future. But man,

for the most part, inherits his Units of Value, and if the present and future are to keep good reckoning with the past, the common denominator should remain as constant as possible.

On the other hand, the Function of Money as a Conservator of Value in Space and Time—looks simply to the interest of the proprietor of Money, and to no other. To him of course a rise in the value of Money is far preferable to a fall. A rise in value not only preserves, but increases, the original value with which those Functions came into activity. A fall, on the other hand, implies a failure to perform these Functions, of preserving value.

As a Means of Direct Purchase of commodities, so far as the interests of a proprietor of Money are concerned, it is desirable that Money should rise in value.

We come now to the Function into which these other Functions may be said to discharge themselves, as rivers into a sea—to that of a Means of Payment. We see that the past, present, and future are bound together in this Function. Upon this Function is cast the burden of discharging those outstanding obligations which are the result of former Valuations. In this Function, former Prices, Accounts, Salaries, Wages, Investments, Appraisals, are ever kept present by the necessity of payment based upon them.

In general, it is plain that to him who has Money in hand, as far as his interest in that portion of his property is concerned, it is desirable that its value should rise.

To him who has not, but desires Money, it is plain that that change is preferable which enables him to obtain more Money than he would otherwise obtain.

A fall in the value of Money, arising from an increase in its available amount, will naturally tend on the average to produce this desired result;* but the creditor to whom the debtor pays his debt will receive Money that is worth less, and the debtor himself will also possess Money that is worth less than before.

It perhaps needs not to be said that the desideratum for the inter-

* I speak, of course, of the redundance of Precious Metals. I am well aware of the demagogue spirit, which is the legitimate child of the Legal Tender Acts, and which has sought to dishonor the country by appeals to the basest motives of the "debtor class."

I know the danger of appearing to give support of Science to that spirit.

On the other hand, I have confidence in truth, and in the honesty and acuteness of my countrymen, and I think the safe course for the advocates of sound currency is to grasp this nettle firmly.

The truth will bear being seen—the grestest danger is in misrepresenting it.

ests of a people is that the value of Money should remain on the average permanent.

Our hypothesis of rise or fall is referred to a certain level, a normal supply of the metals to be coined into Money, and the idea of this normal supply carries with it what is meant by adaptability to the wants of trade, to take up that byword of Inflation and use it in its legitimate connection.

Where, then, there is this steadiness of value the debtor fulfills his obligations by paying, and the creditor is satisfied on receiving the amount of Purchasing Power originally stipulated for.

The value preserved and the value transported prove the same as at the start, and answer the legitimate expectations of the owner.

Prices, Appraisals, all Valuations in fact, are granted a longer lease of accuracy, and thus a fertile source of error is removed from the myriad calculations of business.

In general, to him who desires, and has not, Money, a constant value and normal supply present a majority of favorable conditions.

It will further be apparent that the injurious effect of an alteration in the value of Money, arising from redundance or scarcity of it, will be, other things remaining equal, proportioned to the suddenness and extent of the change, combined.

A gradual alteration is less dangerous than a sudden alteration.

Supposing, then, we have to compare the effects upon prosperity of a rise and a fall thus caused, and the extent and suddenness of which are similar, which of the two is preferable, other things of course remaining equal?

The judgment of economists is clear that a fall is preferable to a rise; or, in other words, that redundance is better than scarcity.

M. Dupont-White said that the metal that followed Columbus' discovery paid off the old debts of Europe.

This is a brusque statement, and indeed repelling, when one mentally supplies, "Yes, but with depreciated Silver." And yet the question is not so simple as this answer would imply. Let us consider, for example, whether debts were not paid which but for this metal never would have been paid at all. Were not bankruptcies and repudiations made unnecessary by this redundance of Money, which but for it would have prevented the payment of those debts? Were not the productive energies of the Western World

stimulated by the redundance of money?* It may also be said that the majority of men being both debtors and creditors, they gained in one capacity what they lost in another.

J. R. McCulloch, in his discussion of the effect of the late great increase in the world's stock of Gold, says, in conclusion :† "Though, like a fall of rain after a long course of dry weather, it may be prejudicial to certain classes, it is beneficial to an incomparably greater number, including all who are actively engaged in industrial pursuits, and is, speaking generally, of great public or national advantage."

Roscher (Grundlagen der Natiopal Oeconomie, sec. 141) points out that the Gold Discoveries by preventing a dearth of Money, which without them would have probably occurred, saved the nations from a grievous malady. On the other hand, he explains, in the sense expressed by McCulloch and Chevalier, how a fall in the value of Money may stimulate to a notable increase of national production.

Chevalier, in the second edition of La Monnaie (1866), referring the reader to his work on the Probable Fall of Gold, gives a *résumé* of the subject discussed in it, which may here conveniently serve to suggest the nature and variety of the questions involved (the full discussion of which is forbidden by the limits of this essay) as well as the conclusions of the distinguished author.

The questions which are there examined he says (La Monnaie, pp. 759, 760) are as follows :

The outlet offered to the Precious Metals by peoples which at present lack a sufficient proportion of Precious Metals in their instruments of exchange.

The increased demand for Coin which may arise from the development of business and increase of populations.

Luxury and the employment it may give to the Precious Metals.

Classification of incomes which will, and incomes which will not, be injuriously affected in the degree of prosperity which they procure.

The sufferings and embarrassments which, it appears, must accompany the change.

* The familiar view as to the injurious effect of redundance of Precious Metals upon the development of Spain does not exclude this idea.

† Encyclopædia Britannica, article, Precious Metals, He denies, however (in 1858), that Gold had fallen in value.

The profit which will accrue from this fall in the value of Money to certain categories of persons, and to society.

The saving which States may be enabled to make in the payment of their debts and the interest on them.

"In fine," he says, "the change will profit those who live by present labor; it will injure those who live on the fruits of past labor, be it their own or that of their fathers.

"In this respect, it will act in the same direction with the greater part of those evolutions which are accomplished in virtue of the great law of civilization to which ordinarily we assign the noble name of progress."*

Explanatory Note.—In the foregoing classification of the Functions of Money, the peculiar importance of the function of a Means of Payment may not unprofitably be illustrated by a reference to the discussion of the causation of the Value of Money, in Chapter VIII and note.

The Money obligations, of which Payment is a fulfillment, are the outcome of the Legal and Lawful Position which the needs of men and of society, as regulated by Private and Public Law, have given to whatever merchandise serves as Money.

The failure to comprehend the influence of Law upon the value of Money-merchandize, is curiously illustrated by the almost inveterate custom of writers to speak of Money as a Medium of Exchange of Commodities, as if this definition exhausted the subject! Civil Society is inconceivable without Money of some sort. Government can not be carried on, Law can not be administered, without Money. The moment they come into being, taxes, appropriations, fines and damages, salaries, etc.—in a word, a multiplicity of obligatory payments—come also into existence, in which the idea of exchange of services, and, still more, that of exchange of commodities, is so remote as to be unavailable as a principle of classification.

Meantime the private citizen is naturally led to the use of some sort of merchandize as a convenient middle thing—medium, *tertium comparationis*, measure—in his exchanging, which, if it be fit for its purpose, will, in the words of that greatest of Jurists, Paulus, with its general and permanent value and its divisibility, mold itself to the disparate commodities which men would gladly barter, and thus facilitate exchanges.

Now, the Government can not exist without some kind of Legal Tender and Lawful Money; and in practice Governments usually make that merchandize Legal Tender and Lawful Money which the citizens are in the habit of using chiefly as a Means of Purchase.

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* A cet égard, il agirait de même que la plupart des evolutions qui s' accomplissent en vertu de la grande loi de la civilisation, à laquelle communément, on assigne le grand nom de progrès.

In the foregoing lines I have given "debts and the interest on them" as an equivalent to the French "rentes."

CHAPTER VII.

THE EXAMPLE OF ENGLAND.

1. Restriction and Resumption of Cash Payment.

Re-organization of Coinage in 1717—Market relation of the metals in the Eighteenth Century—Re-coinage of Gold, and Law of 1774—Limitation of Silver coinage in 1799—The Five-Shilling Dollar—Estimates of stock of Specie and Notes—Restriction of Cash Payment—The One and Two-Pound Notes—Characteristics of the Restriction Period—Professor Jevon's Table of Prices—Estimates of Circulation—Preparations for Resumption—Coinage Act of 1816—Resumption Act of 1819—Estimated increase of Specie Stock—Withdrawal of One and Two-Pound Notes—Policy of the Bank—The non-withdrawal of the small Notes—Repeal of the Act directing withdrawal—Speculation and crash of 1825.

2. Demonetization of Silver in 1816, and its relation to Resumption.

Prices from 1815 to 1824—Stages of transition from Paper Prices to Gold Prices—Rise of Value of Gold—Normal reaction from War and Inflation or deficient Supply of Gold—Stock of Specie in Western World, 1810—Annual product, 1810-30—Existing Supply of Gold—Mode of obtaining it—Misfortune of England's position—Condition of Monetary Theory and Statistics—Demonetization of Silver—Question of Legal Ratio—Existing Supply of Silver—Silver Standard on the Continent, and Demonetization of Gold—Effect of Act of 1816—The Silver Price of Gold—The argument for permanence of the Value of Gold—Effects of the demand for Gold for Resumption upon its Silver Price—The employment of Gold and Silver as Legal Tender at that period—The cessation of the War Demand for Gold—Local Values—Effect of use of full-weight Silver in Resumption—Application of M. Mannequin's argument for permanence of Value of Gold—Explanatory note—Position of Resumption Act in English controversy between Specie and Paper—Coinage Act popularly identified with Measures of Resumption.

1. RESTRICTION AND RESUMPTION OF CASH PAYMENT.

In the reorganization of the English Coinage System, in 1717, in which an amount of Gold about five per cent. less than had been previously fixed upon was now made the lawful equivalent of the pound sterling of Silver, although the change was expressly intended to guard against the exportation of Silver, Gold remained slightly over-valued. Twenty shillings of Silver were worth more in the market than $\frac{2}{21}$ of a guinea, which was the chief Gold Coin then in use.

The legal rate was 1 to 15.21 the market rate about 1 to $14\frac{95}{100}$.

Although thus over-valued, and hence more and more in demand as the cheapest Lawful Money in the business relations of the chief Commercial Country in the world, Gold stood during a great part of the 18th century (notably between 1736 and 1794) at a lower average price than in 1717.

The discovery and increasing product of the Brazilian gold-mines is naturally assigned as the cause of this decline.

At about the time these mines were most productive, Gold fell for a time in some markets in Germany (which then maintained the Silver Standard) to the unusually low figure of 1 to $13\frac{94}{100}$.

Subsequent fluctuations thus failing to lower Silver or raise Gold beyond the line of the new legal relation, Gold became the controlling element in British currency.

Both Silver and Gold were of course Legal Tender for all debts and all amounts.

In 1774, the great mass of Coins having been deteriorated by long use, and a large importation of Coins below full weight having taken place, the question of re-coinage came up in Parliament. To re-coin the entire stock at once was beyond the power of the Mint, and it was resolved to commence the work with the Gold, and in order to regulate for the time the use of the deteriorated Silver Coins, it was ordered that in the case of payments in excess of twenty-five pounds in one payment, the excess should be paid, if in Silver Coin, by weight, and not by the number of Coins.

The war with the Colonies followed, leaving a depleted treasury, and in 1793 the threatened storm of war with France broke out, and the re-coinage of Silver was further postponed.

In 1799, a rise in Gold having brought silver to the Mint, a law was passed inhibiting the coinage of Silver, from which fact Ricardo remarks,* it would appear that "it was the intention of the Legislature to establish Gold as the Standard of currency."

In 1804, dollars were coined at a private Mint by the Bank, of a nominal value of 5s., but worth in Silver only 4s. 6d.†

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* High Price of Bullion, etc. For text of statute, see Addenda, p. 196.

† In view of the policy subsequently established by the Coinage Act of 1816, which has since compelled the majority of British population to depend mainly on such "Silver promissory notes," as Mr. Pitt called them, in what they have to do with Money, it is interesting to note, as late as 1804, such observations as the following:

"To issue (Bank dollars) at that rate is no less a fraud on the public than if one-ninth of the silver in the shilling was taken away and the remaining 10½d. coined into the shape of a shilling and issued as such."

Lord Folkestone on the Counterfeit Dollar Bill, Cobbett Parl. Deb. 1804, p. 894.

This coinage of Tokens is of course a legitimate descendant of the policy of debasement formerly so prevalent.

The Bank-note currency consisted of notes of the Bank of England and Ireland, and of the Country Banks; the former issuing until 1794, no notes of less denomination than £10, while the latter had been since 1777 restrained in their issues by a law forbidding the issue of notes for less than £5.

Of other forms of credit circulation the limits of this essay forbid me to speak.

Of the amount of Coin and of notes in use, widely varying estimates have been made.

Mr. Rose, one of the Secretaries of the Treasury, estimated, in 1798, the Gold Coin then in use at 43 million pounds, but upon grounds which suggest themselves that the estimate is exaggerated.*

Twenty years later, Mr. Morrison, Master of the Mint, estimated the Gold in use, in 1790, at 20 to 25 millions, while Tooke gives 22½ millions as the Gold circulation before the Restriction.†

In the debate upon Lord Stanhope's Act in the House of Commons, in 1811, Mr. Johnstone gave as an estimate 30 millions of

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In Locke's time it was called "raising the Value of the Money." His discussion of the subject is eminently suggestive. Among other things he says (Works, fo. II., 89):

"Since therefore we are not from matter of Fact informed what were the true motives that caused those several changes in the Coin, may we not with Reason suspect that they were owing to that policy of the Mint—to raise the value of silver in the Coin to promote the work of the Mint? The business of Money, as in all times, so even in this our quick-sighted age, hath been thought a mystery. Those employed in the Mint must by their Places be suppos'd to penetrate deepest into it.

"This at least they were not mistaken in that they brought work to the Mint and a part of the Money coined to the Crown for seigniorage: in both which there was profit."

Bodin says of the same thing: "For men have so well obscured the facts about Money, by means of (*Billonage*) debasing the Coin, that the greater part of the people do not see them at all, (the Moneyers do) as Doctors do who talk Latin before women, and use Greek characters, Arabic words, and Latin abbreviations, fearing that if people understood their receipts they would not have much opinion of them." De la Republique, Edition 1577, p. 968.

* A Brief Examination into the Increase of Revenue, etc., London, 1799, Appendix, p. 4.

† Tooke, History of Prices (I. 1, 117). I have to ask the reader's indulgence for the citations from Tooke's History of Prices in this essay: they refer not to the original, but to the German Translation—an authorized translation, with valuable addenda: Tooke-Newmarch Geschichte und Bestimmung der Preise: translated by Dr. Asher. The original was inaccessible to me.

Specie for the period preceding the Bank Restriction, while in the debate of 1819, Mr. Peel quoted Lord Liverpool's opinion, to the effect that the amount of Gold in the country, in 1792, was 30 millions.

Now, according to the estimate of Jacob, as adopted in Tooke-Newmarch's History of Prices, the total amount of Gold and Silver Coin in the Western World (Europe, North Africa, and America), in the year 1700, was 170 millions of pounds sterling.

The average annual product of the Precious Metals, from 1770 to 1809, is fixed by the same authority at 8 million pounds, and the sum of Gold and Silver Coin in the Western world, at the latter period (1809), at 380 million pounds sterling.*

Allowing a wide range for inaccuracy in these estimates, it may safely be said that from one-tenth to one-fifteenth part of the Specie then existing in the three continents was in use in Great Britain at the period of Suspension of Cash Payments.

The quantity of Bank-notes and Country-notes circulating at this period, was estimated by Mr. Johnstone at 11 and 7 million of pounds respectively.

The period of Restriction of Cash Payment extended from 1797 to 1821. The original Restriction was the result of an order of the King in Council made upon the representations of the Chancellor of the Exchequer as to an unusual demand for Specie (probably for hoarding), in consequence of exaggerated alarms in different parts of the country.

The order directed the Bank not to issue any cash in payment until the sense of Parliament should be taken.

Parliament met, and passed the first of a series of Acts "continuing for a limited time the Restriction," and the Bank Directors were also protected against legal proceedings.

The drain of Specie, caused by the exigencies of war, was of course accompanied by an increased use of Bank-notes, and events presently led to the withdrawal, in 1797, of the restraining barrier imposed by the 5 pound limitation of the law of 1777. This permission to issue small notes was to extend until the Bank should resume Cash payments. In consequence of this measure, one- and two-pound notes speedily usurped the place of Coin.

It would be of course foreign to my purpose to attempt even an outline of the economic features of the period of Restriction.

* F. Xeller, Die Frage der Internationalen Münzeinigung, p. 40, gives 400 million pounds for 1808.

Such an outline would be incomplete without full treatment of Paper Currency, which my subject excludes; and, indeed, as this period offers a battle-ground for still undecided controversies in which most of the noteworthy European economists have taken part, it could not be adequately treated without an exposition of the history of the controversy, and of the present state of the argument.

Suffice it, then, to say, that this period of uninterrupted wars waged on continental battle-fields was characterized in Great Britain; by speculation alternating with depression of business and culminating in disastrous crises; by an unusual proportion of bad harvests, and their concomitant high prices of provisions, while the uncertainties of the situation were aggravated by the changing duties on breadstuffs; by exaggerated fluctuation in prices; by increased circulation of paper, and increased fluctuation of its amount.

A remarkable development of inventions and manufactures falls also within this period, and it is also marked by the exceptional position of England with reference to the ocean trade of Europe, occasioned by Napoleon's attack on British commerce.

The following tables indicate the movement of the average of general prices in this period:

FROM PROFESSOR JEVONS' TABLE OF PROPORTIONAL VARIATIONS OF AVERAGES OF PRICE.*

Year.	*Gold.*	*Paper.*	*Year.*	*Gold.*	*Paper.*
1782	100		1807	129	132
1783	100		1808	145	149
1784	93		1809	157	161
1785	90		1810	142	164
1786	85		1811	136	147
1787	87		1812	121	148
1788	87		1813	115	149
1789	85		1814	114	153
1790	82		1815	109	132
1791	82		1816	91	109
1792	93		1817	117	120
1793	99		1818	132	135
1794	98		1819	112	117
1795	117		1820	103	106
1796	125		1821	94	
1797	110		1822	88	
1798	118		1823	89	
1799	130		1824	88	
1800	141		1825	103	
1801	140	153	1826	90	
1802	110	119	1827	90	
1803	125	128	1828	81	
1804	119	122	1829	79	
1805	132	136	1830	81	
1806	130	133			

* Jevons. Variations of Prices and Value of Currency since 1782—Journal

Of the amount of the Paper Currency during the period of Restriction trustworthy accounts are not attainable, there being no accurate record of the issues of the Country Banks.

The issues of the Bank of England had risen from an average of 10 millions before the Suspension to an average of 17 millions in the early years of the 19th century, and between 21 and 29 millions in the period from 1810 to 1820.

Mr. Johnstone, a member of Parliament, before mentioned, gives in debate in 1811—

5 millions Specie,
23 millions Bank-notes,
32 millions Country-notes,

as an estimate for the circulation in 1810.

It had been an unvarying feature of the various Bank Restriction Continuance Acts which had from time to time given a new term of life to the inconvertible paper circulation, that the paper should be redeemed within six months after the conclusion of Peace. Among the results of Waterloo came the necessity imposed upon the business world of Great Britain of abandoning Inflation in its various forms and returning to Coin and convertible Notes.

The dreaded day was eventually deferred—first to 1818, then to 1819, and again to 1820–23—but it would seem safe to say the work of preparation was by all interested silently begun at once.

In 1816 the new system of coinage was introduced; the quality of being a genuine "pound sterling" was taken away from Silver; a new Coin, the sovereign of Gold, was made the new pound sterling and Monetary Unit and sole unlimited Legal Tender; while the place of the Legal Tender shilling was filled with a new coinage of Silver tokens, whose paying power was limited to sums of 40 shillings.

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of the Statistical Society, 1865, p. 294. In this article the author sets forth fully the Fluctuations of Prices of various groups of articles which he selects in forming his average, and explains the modes of calculation of fluctuation.

Without attempting to enter into the question, it may be noted that the "geometric mean" which Jevons adopts in calculating Fluctuations of Prices is purposely selected to secure against overstatement of the fluctuations, and as being most likely to indicate those changes which are especially attributable to supply of Gold.

While recognizing the tentative and approximate character of such averages, one may safely accept the figures given as indicating the value of Money to the majority of men in England at that time.

£5,124,000 of new silver Coins were issued in 1817 in exchange for worn-out Coin.

According to Tooke, the price of Gold in Bank-notes, which showed a premium on gold varying from 35 to ½ per cent. in 1815, ranged in 1816 from 3 to ¾ per cent., in 1817 from 2 to 4, in 1818 from 4 to 6, in 1819 from 6½ to Par.

In 1817 a partial Resumption or redemption in Coin by the Bank of certain classes of Bank-notes ensued, upon which the authorities do not seem to be agreed.*

The Resumption Act of 1819 continued the Restriction of Cash Payment to February, 1820, and thereafter ordered the redemption by the Bank of its Notes, when demanded in a quantity of not less than sixty ounces of Gold (over 1,000 dollars), in Gold Bullion, at a discount for paper of about 3⅞ per cent. till October, 1820; from that date till May, 1821, at about 2 per cent. discount; and thereafter till May, 1823, at Par, but still in Bullion; while after the latter date all Notes were to be paid in Gold Coin on presentation.

The Bank was, however, permitted to pay in Bullion at higher rates in fixed periods, and in Gold Coin after May 1, 1822. A subsequent law permitted full redemption after May 1, 1822.

The policy of the Bank, hereafter alluded to, having proved successful, the Bank availed itself of this permission. The Bank-notes rose to Par, and, without any apparent shock to business, Resumption of Specie Payment became an accomplished fact.

Of the amounts of Specie in the country at this period it is difficult to form a correct estimate.

The metallic reserves of the Bank in the months of August and February, from August, 1816, to February, 1818, were respectively 7½, 9⅜, 11½, and 10 million pounds.

In the "Memorandum" furnished to Parliament by the Bank Directors in 1832, they give 20 millions as the aggregate amount which they were obliged to obtain from foreign countries in order to fulfill their duties under the Act of 1819.

This, of course, is in addition to the existing reserve, which in August, 1818, stood at 6 million, in 1819 at 3 and 4.

In view of these figures and of the low premium in Gold which had prevailed for some years, and the amount of Silver Token Money issued in 1816, it would seem safe to say that the

* See Tooke-Newmarch (I. 1, 199), and Levi's History of British Commerce, p. 141.

Specie stock of 1821, compared with the Specie stock of 1812 and 1813, must indicate an increase of from 25 to 30 million pounds.

A controlling purpose of this great accumulation within the control of the Bank, of Gold obtained from foreign countries was the contemplated substitution of Gold in place of the one and two-pound Notes of the Bank of England, and of the Country Banks as well. It will be remembered that the Act of 1797, which originally authorized their issue, limited their duration to the period of Restriction of Cash Payment.

7½ million pounds were accumulated by the Bank to redeem its own Notes of these denominations.

In providing as much more for the redemption of the Country-notes, the Directors, according to their own Account, before cited, had anticipated by three years the commands of Parliament.

A large part of their own Notes were withdrawn in 1821, and although directed to be ready to redeem the Country-notes before 1825, they had already provided themselves with the necessary Gold in 1822.

The effect of this policy of the financial magnates of Great Britain was well and tersely indicated by the words of the Memorandum of 1832, already cited. This great supply of Gold could "only be purchased by reduced prices of commodities."

It seems to have been the purpose of the Bank Directors to hasten the period of redemption of the small Notes before the time ordered by law.

Whether and in either case to what extent in this action they were leaders or were led by circumstances, it is difficult to decide; but Ricardo himself had suggested beforehand a motive of self-interest for such action.

He said in the debate of 1819: "They had no real interest in depreciating the currency: it would be rather their interest to raise it, even to double the value. They were in the situation of creditors, not of debtors; their whole capital being in Money or in Securities representing Money."

It now became more and more evident that the substantial interests of the nation were suffering grievous ills, arising from mistaken legislation. Brougham's proposition to reduce taxation in proportion to what was supposed to be the fall of prices, and the attempt to reduce the sovereign from 20 to 14 shillings fall within the year 1822.

In the end the contest was allayed by the passage, in the same year, of a law repealing the provisions of the act of 1819, which

required that the Country-notes for £1 and £2 should be withdrawn on and after May 1, 1823.

A "respite" was thus granted in the substitution of Coin for Paper. In truth, however, the Gold requisite for the contemplated withdrawal of Paper having been already collected from abroad, the law appears to have set these millions free to produce what may be called a Coin Inflation.*

A rise of Prices now began and a revival of business, which, upon this new basis of Paper and Coin, swelled into one of the great tidal waves of speculation, whose devastations make epochs in Commercial History.

In the space intervening before the crash of 1825 immense investments were made in foreign loans, of which those to the newly recognized South American Republics were a large part; while in 1822–5 companies for new ventures in business found credit enough for a nominal capital of more than a hundred million pounds.

But for the purposes of this essay the nature of this ever-memorable Crisis is sufficiently indicated by the figures in the Table of Prices, which mark a rise of 17 per cent. in 1825 above the average of the three previous years, while the decline in the year following 1825 is hardly less marked.

In 1826 Parliament decreed the withdrawal before 1829 of Country-notes under £5.

2. DEMONETIZATION IN 1816, AND ITS RELATION TO RESUMPTION.

Having thus sketched the outline of events, we may now turn our eyes to those questions suggested which are specially germane to our subject.

We have seen that within the years 1815 to 1822 (leaving thus a wide margin for possible error) Great Britain had increased her home stock of Precious Metals, of which Gold formed six-sevenths, from 10 or 12 millions to from 35 to 40 million pounds.

* There is an interesting analogy between this and the Coin Inflation in Germany, directly and indirectly consequent upon the payment of the War-fine. To use the expression of a German economist, Germany "discounted the War-fine" in speculation, and the Monetary Policy of the Government added fuel to the flame. Wirth estimates the increase of the Metallic and Paper Currency at 40 per cent. (See Geschichte der Handelskrisen, 1874, pp. 434, 435; also Die Munzkrisis und die Notenbank Reform, pp. 35, 36, 37.) Was it policy or was it a blunder? Has Bismarck taken a leaf from the book of the authors of "Cæsarism?" For inflation marked the gold-freighted return from Gaul of Cæsar, that greatest of statesmen, and the stores of Egypt enabled Augustus in like manner to bless his country.

Prices, according to Professor Jevons' averages, stood as follows:

YEAR.	GOLD PRICE.	BANK-NOTE PRICE.
1815	109	132
1816	91	109
1817	117	120
1818	132	135
1819	112	117
1820	103	106
1821	94	.....
1822	88	.....
1823	89	.....
1824	88	.....

For the earlier years here noted, it will be apparent that the Bank-note Prices are most important, the overwhelming majority of transactions being performed with Paper.

The figures of 1815, 1816 show in striking manner the effects of the financial crash of those years, a leading feature of which was the withdrawal of a large proportion of the Paper Currency.

Considering the averages of the period 1817–1820, when Gold was coming more and more into use, we find that Paper Prices stood at an average of 119½, while a discount for Gold would have lowered the average to 116.

When, however, the process of obtaining Gold from abroad had had time to exert its full effect on Prices, and Gold was actually substituted for Paper, the fall took place, as depicted in the table of Prices, giving for 1821–1824 an average of 90, in the place of 116—a difference of level of nearly 23 per cent.

The problem of chief interest to us is, of course, what is the connection between this sudden demand for some 25 or 30 million pounds of Gold and this abnormal subsidence of Prices.

It should be observed, of course, that it is not the subsidence from Inflation Prices in Paper, properly speaking, of which account is taken.

134¼ is the average of Paper Prices from 1810 to 1820. The last four years show a decided decline from the Inflation level, 152 having been the average from 1810 to 1814.

These figures show, of course, the height of Inflation. But, as we have indicated, there were in England, in 1817, 1818, 1819, and 1820, many millions of Specie, Silver Coin, and Gold Coin, and

Gold and Silver Bullion used as merchandise of exchange. The Specie then which in those years was exchanged for commodities would buy, in the years 1821–1824, about 25 per cent. more of the same commodities.

Of course, there were fewer transactions in Gold in the former than in the latter period. The greater part of business was done in Paper, and hence the average of Gold Prices for the former period is, to a certain extent, artificial;* but, nevertheless, the fact, such as it is, is there, and must be explained.

We ask, then, is this subsidence of Gold Prices—is this upheaval of the value of Gold (and, nominally at least, of Silver with it, within a few per cent.)—merely an internal and self-wrought revolution of England's business; a normal continuance of the reaction from war speculations that had failed, and from rioting in card palaces of credit founded on Paper Money, which marked the former change from a level of Paper Prices of 1810–1814, 152, to 109 in 1816? Or does it indicate a demand for Specie, outstripping the normal supply—a local "*Geld-theuerung*," in Roscher's phrase—a dearth and dearness of Gold?

It is plain that both factors must be present. The latter, of course demands our attention. The extent to which it was active can, of course, best be shown by examination of the *status quo* of the stock on hand, and annual supply of the Precious Metals.

Taking, then, the estimates of Jacob (Tooke, Part 7, Appendix 2), we find that, as before stated, the total Gold and Silver used for purposes of exchange in Europe, North Africa and America, in 1810, is fixed at 380 million pounds. The average annual production of the two metals, for the period preceding 1810, is estimated at 8 million pounds sterling.

About 35 per cent. in value of the total stock, at that time, was in Gold, which fraction, applied to the stock used for exchange, would give 133 millions as the stock of Gold used for that purpose in 1810.

For the period 1810–1830, the annual product shows a marked falling off, in part attributable to the wars among the Spanish American Republics.

* This matter of nominal Prices—of the importance of the number of transactions—is a promising and much neglected field of analysis. Gentlemen reason about "Depreciation" of Silver without a thought of the number of exchanges actually made between Silver and Gold or Silver and other commodities in Silver using countries. The Purchasing Power of Silver in 1876 is a dangerous subject for Gold-monometallists.

Jacob gives £5200000 as the annual product for this period, and of this, according to Soetbeer, about 29 per cent. was Gold.

This would give, therefore, a total annual supply of about £1½ millions of Gold, and this £1½ million must, beside making good the annual loss, if possible, honor the drafts, not only of the Western World, but of Asia, both for use as Money and for the arts.

The extent to which the supply was deficient may be best judged of by the fact that Jacob estimated that the stock of Gold and Silver in use in the Western World for purposes of exchange decreased from 1810 to 1830 by about 17 per cent., namely, from £380 to £313 millions.

If we make, upon the basis of the preceding approximations, an estimate of the amount of Gold used for exchange in Europe, Africa, and America, in 1820, we shall find that it amounted to about £120 millions.

Such being, to the extent to which these approximations can represent it, the *status quo* upon which the new demand of £25 to £30 millions made itself felt, and within which it caused a redistribution of the stock of the world, it is plain the movement thus caused was a formidable one.

If we ask further how this determination of Gold to England was brought about, we shall remember that the power wielded by her merchants and financiers inevitably, under the necessity of Resumption, was directed to lowering the price of commodities—and primarily in England itself.

For it came, not in solid masses, but little by little, through the labyrinthine avenues of business; and, in order to get it, it was necessary to offer a high price for it, and this could only be done, of course, by low prices of commodities; and, to prevent it from flowing away again, the same causes must remain active, and prices must remain low.

We see, then, that it was England's misfortune to be called upon by regard for national honor, and, in order to free her business from the incubus of inconvertible Paper, to make a new and large demand for Specie, and, in so doing, to reinforce and accelerate a general tendency to decline in Prices, expressed in Coin, which a failure of supply of the Precious Metals had brought upon the world.*

* It may be suggestive to recall, in this connection, the state of supply to-day—the annual product of Gold waning, that of Silver increasing, while the total product of the two metals remains nearly constant.

Now, Resumption being a necessity, and inasmuch as the available stock of Precious Metals in the Western World was bereft of its accustomed annual renewal, the question naturally arises, Was not this subsidence of Prices—this upheaval of the Value of Money—equally a necessity?

Was not this the only price at which the inestimable gain of the return to a Specie basis could be attained?

If we look closely at this question, we shall find that it readily resolves itself into—

First. A question of percentage of upheaval; and,

Second. A question of suddenness of upheaval.

In other words, supposing that a large part of the fall of Prices was necessary, was the whole of this fall necessary?—and, secondly, was it desirable that the change should be so abrupt?

In connection with either question, it is eminently suggestive to note how little the carrying distance of the artillery brought to bear upon Paper Prices was understood by the best brain of the time.

In the debate on the Resumption Act, Ricardo, the leader of the Economists, amid the applause of the House, pronounced the difficulty in the way to be only that of raising the currency 3 per cent. in value. Or, he said, if a proposed amendment shortening the time are to be passed, "an extraordinary demand for Gold might take place for the purpose of coinage, and this might enhance the value of the currency 3 or 4 per cent., in addition to the first enhancement."*

Many years after, J. R. McCulloch apologized for the methods of Resumption, on the ground that Parliament could not take into consideration the appreciation of the Precious Metals.

But even this does not explain the selection of the rarer of the two metals as sole Legal Tender. The distinguished author fails to state why Parliament could not take the appreciation of the Precious Metals into account. If this were the case—if it be true that Parliament could not do so—certainly Parliament was suffering under disabilities which demand attention.

But without attempting to discuss either the policy of the magnates of the London Money market, or that of the Resumption Act, whose effect their policy had forestalled, I shall present the ques-

* Ricardo is said to have admitted his error afterward. See William Ward, Remarks on the Commercial Legislation of 1846.

tion of percentage in a manner directly germane to the subject of this essay.

Did the establishment of the Gold Standard tend to aggravate the fall of prices which accompanied Resumption, or, in other words, is not the Coinage Act of 1816 responsible for a material portion of the ills from which the population of Great Britain suffered?

I do not of course restrict the supposition, to which I here desire to ask consideration, to a coinage of Silver at the existing legal ratio to Gold. The ratio is a question of detail, important of course, but secondary.

Whether Silver should be coined at the relation established in 1717, at the suggestion of Sir Isaac Newton, or that adopted in coining the five shilling Dollar in 1804, or at the rate adopted by the American Congress in 1792, or by the French Directory in 1803, is a question of detail, upon which much may be said, but which it is not necessary to take into consideration in a general view of the policy of retaining this metal as material for Money, further than to observe that a coincidence of the legal ratio with that of other countries and with the market price ought to be aimed at. The former relation was 1 to 15.21, while on the continent the great stock of France was balanced at 1 to 15½. In Continental markets, Silver was worth less by several per cent. than at the old legal relation in England.

The plan of restoring Silver was suggested in England after the Coinage Act of 1816; and after the silent preparation for Resumption in obedience to its provisions in the rarer of the two metals had affected the market and lowered the Gold price of Silver.

As far as I can learn, however, this narrow view of adherence to the former legal relation was unfortunately represented on either side of the debate, and I have met in the work of some distinguished English writer—whose name I can not now recall—an allusion to a "gain of three per cent. at the risk of repudiation," or words to this effect, which indicate the complete misconception of the question above suggested, as well as an unconsciousness of the relative effects upon its price, of "monetizing" and "demonetizing" a metal.* (See Chap. IV.)

I desire it also of course to be clearly understood that I propose

* The German demand for Nickel for coinage raised the price from 12 francs the kilo. to 30-36. If "monetization" raises one metal 300 per cent., why may it not raise another three per cent.?

these questions as to the use of Silver with Gold in the work of Resumption simply and singly with a view to Permanence in the Value of Money, apart from all other grounds which may determine the choice of a metal for Money.

It does not admit of argument that Gold is more portable than Silver, but it is also true that he who legislates with a sole view to portability is beyond the reach of argument.

Chevalier says: "At that time the men who exercised the greatest influence on the Government and on public opinion, allowed themselves to be unduly influenced by the advantage which Gold possesses of being more portable than Silver. They thought also that Gold fulfilled better, or at least less imperfectly than Silver, the important condition of fixedness of value. In that they probably deceived themselves."

My question is therefore, were they not deceived in thinking that Gold alone was more steady in value, not than Silver, but than Gold and Silver together?

It has probably occurred to the reader that inasmuch as the estimates of stock on hand in the Western World and annual product in the period of Resumption give the amount of available Silver (at the ratio of 1 to 15½) as about twice that of Gold, the burden of proof upon these questions rests with the advocates of the demonetization of Silver in 1816. The task of proof has, as far as I have been able to observe, never been fairly accepted, and the argument for Gold remains thus far radically defective.

The task will appear still greater when one recalls that Europe can at need draw upon the reservoirs of Asia for the Precious Metals, and that that stock consisted chiefly of Silver. What would have been the effect if, after 1815, the magnates of the Money Market had set their hearts to the problem of obtaining Silver from Asia without adding England's demand to the other agencies that were sure to disturb the financial peace of Europe?

It appears to me clear, and will, I believe, so appear to any one who gives impartial and earnest consideration to the question, that such a course would have procured the means of Resumption, partly in Gold and largely in Silver, without producing more than a moderate portion of the subsidence of Prices which we have noted.*

* It is interesting to consider further what would have been the result had England adopted the ratio of 1 to 15½ in the coinage of Dollars or quarter-sovereigns of Silver!

In spite of England's demonetization of Silver, the French stock of metal

In estimating the influence of the Act of 1816, it must be remembered that the position of Gold in countries of the Silver Standard was by no means that of a demonetized metal.

Only about a third of the total Specie in use was Gold, and the Silver in use weighed forty-five times as much as the Gold in use.

Gold was as portable then as now, and circulated outside of the country that coined it, and the quantity being small, and the rate in Legal Tenders at which such coin would be receivable in certain quarters being not unfrequently fixed by the authorities, Gold served as a kind of International Money.

The bulkier metal could not of course serve such a general purpose, although there must have been considerable interchange of Silver also.

But under the Act of 1816, the currents of Gold and Silver which before the war could flow in and out of Great Britain indifferently, were henceforth inclosed in dykes and locks.

Gold flowed in from the Continent, as we have seen, and bared it of a share of its International Money, but could not flow out in response to some special demand from abroad. The outflow of a small quantity set the reactionary forces of Price in motion, and thus the little that had gone out was presently brought back again. And this was the case, of course, simply because Silver could not flow in to take its place.

For Silver was walled out of Great Britain by the Act of 1816, which excluded it from use as Money, excepting of course for the percentage of Silver tokens used as change, which could not materially increase in amount.

The nature of the effects of the Coinage Act of 1816 in connection with Resumption will more fully appear in the following consideration of the asserted permanence of the value of Gold.

For, while so far as I have been able to learn, the question of Gold and Resumption in England has never been met, in the sense in which we have here stated it: that is, the full comparison has never been made between the upheaval of the value of Gold as it was, and the value of Silver and Gold together as they would

has since served as a balance-wheel in keeping the prices of the metal close to her ratio of 1 to 15½. The market ratio of 1803 was the market ratio of 1871, and it was the German demonetization that broke the balance. Had England joined France in 1816, would not the entire Western World (including Silver-Standard countries, which, like Prussia, coined Gold, and subsequently made it receivable by Government at a certain ratio) have been induced to harmonize upon this ratio?

have been under the action here suggested; yet in another and subordinate relation, proof in this connection has been supposed to be discovered of the steadiness of Gold.

"The Silver price of Gold," it is said, "was not affected by England's extraordinary demand for Gold; Gold rose in Purchasing Power, it is true, but Silver rose with it."

At first sight it would seem that the logical conclusion was, not that Gold possessed any peculiar permanence, but simply that Silver was as bad as Gold.

Nay, more than this; if a sudden demand for one-fourth of the available stock of the yellow metal produced no marked rise in its price as expressed in the white metal, the two forming all the Money in existence, the obvious conclusion is that the white metal was accepted as a substitute for the yellow.

If the slightness of the rise of price is to be credited to some mysterious quality of Gold alone, one is led to the admission that the converse of this proposition can not be true; that is, that while Silver is a substitute for Gold, Gold is not a substitute for Silver. If the latter were true, we should have to credit the "permanence" to Silver, and thus, on the reasoning of the Gold-monometallist, each would would be more permanent than the other!

We see, therefore, that this superstition about the incomprehensible qualities of the more valuable yellow metal is directly reducible *ad absurdum*.

We see, also, that while it was the faculty of taking the place of Gold which the laws of the continent gave to Silver, that prevented the Silver price of Gold from rising higher, England, by the law of 1816, erected an impassible barrier to that inflow and outflow of both the tide of Gold and Silver (for Gold is to a certain extent held back, there being nothing to take its place), which is the condition of permanence in their relative value.

It is, however, important to inquire into this assertion that the Silver price of Gold was so slightly affected by Resumption.

The effect of the Acts of 1799 and 1816, by which Silver was excluded from use as full-weight Lawful Money in Great Britain, may be clearly seen in a table prepared by Professor Jevons, in which the variations of the Prices in Bank-notes, of Gold and Silver Bullion are given for the period of Restriction and Resumption.

I am, unfortunately, unable from information now within my reach to determine what equation between Gold and Silver Prof.

Jevons has assumed as a starting-point in this Table. It may possibly be the old legal ratio of 1 to 15.06, or, perhaps, simply whatever happened to be the ratio of the London Market in 1798.

But, whatever the starting-point may have been, the Table must, of course, reveal the combined result of a multiplicity of causes.

In seeking to single out separate groups of these causes one naturally distinguishes War demand for Gold and its cessation:

Causes peculiar to the Paper Currency in which the price of the Metals was measured:

Exclusion of Silver from present demand, and from prospective demand, during and after Resumption:

Prospect of Resumption in Gold, and Actual Demand for Gold, for Resumption.

The latter classes would naturally be included under the head of Demonetization of Silver.

Taking Gold as the starting-point, we shall find that Silver which (at the ratio upon which the Table is based) commanded, on the average, from 1798 to 1813, a higher price than Gold, was, after these years, permanently depressed in its Gold price—varying, in fact, according to Professor Jevons' Table, from $21\frac{1}{2}$ to $5\frac{2}{3}$ per cent. below the ratio given of 1798.

But, of course, in order to make a full comparison between Resumption in Gold as it was and Resumption in Silver and Gold as it might have been—and the denial by Gold-monometallists that Resumption in Gold affected its Silver Price, raises this whole question—it is necessary to consider, not merely the period of War and Resumption, but the periods preceding and following the action of these disturbing causes; taking account, of course, as far as may be, of all existing causes of alteration, beside that of Resumption in Gold in England.

It will be remembered that (as was indicated on page 73) the average ratio in the English Market, in the eighteenth century, was less than 15.06 to 1.

Indeed, in 1797, according to Tooke-Newmarch (I. 2, 788) the market price of Bullion varied between $14\frac{1}{2}$ and $14\frac{3}{4}$ to 1.

A Table given by Soetbeer (Beiträge und Materialien, etc.) showing the ratios of the Metals in Hamburg, yields for the period 1751 to 1791 an average of 14.69 to 1.

We see, then, that while the War demand for Gold gave to its Silver price a higher level during the Napoleonic wars than it held

during the century previous, yet after the war ceased the Price of Gold, instead of falling back to its former level, rose still higher.

In fact, the general Gold Price of Silver in England, from 1821 to 1850 (ounce standard, Silver worth Gold 4s. 11½d.) shows a market ratio, in London, of 15.84 to 1.

There is, then, a difference of level in the period before 1793 and after 1815 about equal to that between 14.84 and 15.84—a rise of about seven per cent. in the Silver Price of Gold.

How is this general upheaval of the Silver Price of Gold to be accounted for?

Was it because Gold was more "portable" than Silver; or, was it because it was more "steady in value;" or were there any peculiar conditions of demand and supply? Nay, that we may exhaust the repertory of the magistral economy of the day, we ask whether any serious alteration occurred in the relative "cost of production" of the two metals. Did it require seven per cent or any per cent more "labor" in comparison with silver to mine gold after 1815 than was needed before 1793. From my point of view it is self-evident that the peculiar conditions of demand are controlling factors in the situation, and that among these we must enumerate the high ratio of 15½ to 1, fixed by France in time of war, and the exclusion of Silver from England and Resumption of Specie Payment by England in Gold.

It may occur to the reader that there is a defect in the views here suggested, because, as has been stated, Gold was the chief Currency in use in England in the eighteenth century, and hence the actual difference in the use of Gold in England is inappreciable.

This objection might have weight if one were to narrow down the idea of Demonetization to the actual alteration in a certain *status quo ante* in England itself, produced by the Laws of 1799 and 1816, without reference to what must have occurred if these Laws had not been passed.

But I think I am safe in saying that historians and economists do not sanction such a theory of cause and effect as this implies. In reasoning about human affairs, the average tendencies of human action are taken for granted; indeed the self-interest of man is the general underlying postulate of Economics. When men say that a certain law produced a certain result, the existence and normal actions of people who were affected by the law are taken for granted.

If we must enumerate all conditions and conspiring causes, we

should spend our lives in mere cataloguing. To illustrate—the Declaration of Independence would have been null without protoplasm and sunlight; matter and force; the American continent, etc., etc. But we do not regard it necessary to mention all these as elements of reasoning about the Declaration. So of the matter in hand: I have expressly, in speaking of Demonetization, stated the proposition broadly, with a view to what would naturally have occurred if the Silver Coinage had not been limited in 1799, and if the Law of 1816 had not been passed; or, again, if Silver had afterward been restored to its place by the side of Gold, as Lawful Money in Great Britain for the period of Resumption.

Had the Laws of 1799 and 1816 been omitted, the natural working of self-interest which led to the universal use of Gold in England in the eighteenth century would have led to the introduction of Silver as Legal Tender during the period of Restriction as well as during that of Resumption of Cash Payment.*

* It is evident that where there is a scarcity of Metallic Money—and from what else does a "Restriction of Cash Payment" arise?—voluntarily to cut oneself off from a source of supply is improvident if not suicidal. And yet this process was commenced in England with the limitation of Coinage of Silver of 1799, and completed by the withdrawal of the Legal Tender character from Silver in 1816. The stock of Gold in the Western World in 1799 was only about half that of Silver. To limit the coinage of Silver was, therefore, to cut off from English mints and English debtors two-thirds of the existing potential supply of money-metal among civilized nations. And beyond was Asia, whose money-metal was in like manner excluded.

And this at a time of restriction of Cash Payments!

Prima facie, abstracting from any preconceived idea that English finance was wisely regulated in 1799, looking simply with the eyes of a plain man of business, this limitation of coinage appears, as I have said, suicidal. What says science?

I have never seen any allusion to the fact, except in the work of Ricardo, before quoted, and he makes no comment.

I am well aware that it is competent for gentlemen who think of nothing but portability in money-metal, and are enamored of yellow in preference to other colors of coin, to permit themselves to maintain that the views which I have attributed to a "plain man of business." are incorrect.

To show that the plain man of business is in error, it might be said: "If England wanted Gold, she could get it as easily as she could get Silver."

This begs the question. But what else is there to be said? Let us, therefore, examine this assertion. Let us ask if England really could obtain Gold as easily as Silver.

Suppose that Gold and Silver in all the Western Nations stood at 15.21, the English par. There being twice as much Silver as Gold, would it not inevitably occur that the hundreds of vessels coming to England from American and

Our question was, in the earlier portion of this chapter: What, under these circumstances, would have been the average Purchasing Power of the Metals? And in our examination of the argument for Gold, the question now is: What, under those circumstances, would have been the Silver Price of Gold? The difference between what was and what would have been, would indicate the effect of Demonetization of Silver in England upon the Silver Price of Gold.

Our reasoning leads, in my belief, conclusively to the overthrow, to this extent, of the argument for the peculiar steadiness of the value of Gold, as well as of the argument for Resumption in Gold exclusively, beside indicating plainly that the limitation of Coinage of 1799 seriously aggravated the difficulties attendant upon the use of Paper Money.

It is in view of these three questions that the following figures become a most profitable subject of meditation:

European ports could conveniently obtain Silver and bring it to England when they could not obtain Gold? In many ports there must have been little or no Gold and much Silver, and the shippers, whose importation might otherwise have reinforced England with cash Silver, could not or would not take the trouble of seeking out the Gold to bring.

If friction in exchange, if supply and demand are applicable to anything, they must be applicable to the case before us; and hence it follows that if free coinage were maintained in England in both metals, Silver would more easily and naturally flow to England than Gold. This, of course, on the supposition that the English par was the universal par.

But it was not the universal par. There was no universal par.

Now, in the vicissitudes of the ratios of Gold and Silver in the hundreds of ports in South and Central and North America, in Africa, Asia, Europe, in the Islands—with all of which the commerce of England had to do—was it likely that the chances should be favorable to the exclusive exportation of one of these metals to England? And if these chances had been so favorable, which metal would naturally be more easily exportable?

Could such metal be any other than Silver, seeing that Silver was in existence in an amount at least double that of Gold, that the annual product of it was more than three times that of Gold, and that in the great majority of these ports there could be but little Gold in use at all?

Besides this, another all-important fact presents itself. Gold, which had fallen below 15.21 in the eighteenth century, rose above it at its close. The war demand was effective. Silver became then the metal in which it was cheapest to pay debts in England. Newton's law was coming into effect. To equalize the rise of Gold, Silver was coming back to the mints; Gold was dear and rare; the natural current of the great stock of Silver was ready to pour into England. But no! The mints were closed! No more coinage of Legal-tender Silver. If England can not have yellow and extremely portable coin, she will have depreciated and irredeemable paper.

FROM PROFESSOR JEVONS' TABLE, SHOWING THE VARIATION OF THE PRICES OF GOLD AND SILVER BULLION.*

Year.	*Gold.*	*Silver.*	*Year.*	*Gold.*	*Silver.*
1798	100	100	1810	116	111
1799	100	103	1811	109	118
1800	100	111	1812	123	122
1801	109	115	1813	130	133
1802	108	109	1814	134	123
1803	103	108	1815	120	105
1804	103	105	1816	120	94
1805	103	109	1817	103	91
1806	103	108	1818	103	97
1807	103	106	1819	105	99
1808	103	105	1820	103	93
1809	103	106	1821	100	91

Chevalier, in alluding to this subject, says that it does not appear (judging from the price of Gold at Paris) that the absorption of Gold in Great Britain made any appreciable change in its price.† But would Chevalier regard a change of three per cent. as "appreciable?"

On the other hand, a consideration of the state of the market at Hamburg, in connection with Dr. Soetbeer's explanation of it, seems to warrant a totally different conclusion.

The average Silver price of Gold in the Hamburg market, for the six years, 1814–1819, compared with the five years, 1820–1824, shows a rise from 15.28 to 15.82, or about 3½ per cent., and this rise is attributed by Dr. Soetbeer to the demand from England.

In the United States it has been stated on the authority of certain documents put forth by the Government at Washington, in 1830, that Resumption in England brought about a rise in Gold to the extent of 5 per cent., and a general exportation of Gold.‡

If Gold in this country had been, by any of that *vis inertiæ* which accompanies the phenomenon of local values, held to the legal relation of 1 to 15, the rise when it came and led to exportation, would naturally go up to the prevailing price in Europe, which would give a rise of 5 per cent.

A further fact of importance is that the tide of Precious Metals

* Journal of the Statistical Society, 1865, p. 309. The table covers the period from 1798 to 1821, and starts at 100 in 1798.

† La Monnaie, 1866, p. 234. But according to Leon Say (See Appendix, House of Commons Report) there are no trustworthy accounts published of the market ratio in Paris at that time.

‡ Bankers' Magazine, September, 1876, article of Mr. Geo. M. Weston.

flowing to Asia in a current then averaging many million pounds per annum, turned completely and flowed westward from Asia to Europe for a time after 1821.*

To the question why was there no greater rise in the Silver price of Gold in Europe the condition of the leading commercial powers suggests a partial answer. The United States and France in establishing the Double Legal Tender with the Silver Dollar and Franc as their respective Units had by the respective ratios of 1 to 15 and 1 to 15½, given Gold a Silver Price, which was in the main lower than that of the market.

Silver, therefore, being the cheaper Legal Tender, was fixed in general use in these countries, while Gold was readier for export.

So, too, the other nations of the continent used Silver as their Lawful Money, chiefly under laws making it chief Legal Tender and Monetary Unit, although Gold was current and a favorite, as well as legalized, means of payment.

Now, it is obvious that in that period of war, which closed in 1815, this war demand had been active.

Gold was in great demand for the military chest, the royal treasury, the coffers of cambists, and for the hoards which men of every class were led to conceal, and international exchanges had special need of it.

When this war demand ceased, much Gold, including that which England herself had poured upon the continent in her struggle against Napoleon, was thus set free before it had through habit or law become indispensable to local business. When the Gold was taken away, Silver to the extent to which it was possible flowed in to the places left vacant, and while low prices of commodities were required to start the current of Gold toward England the Silver Price of Gold need not be disturbed to any great extent.

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* Tooke-Newmarch.

It is worth noticing that the Hamburg price-lists indicate fluctuations which are probably attributable to that "war demand" for Gold which arises by reason of the superior convenience of carrying and concealing it, as compared with Silver, and which admittedly makes its value less permanent for short intervals than that of Silver. (Roscher.)

The rate from 1781 to 1790 was 1 to 14.76; about the time of the peace of Amiens it was 1 to 15.26, while in 1813, the year of the Battle of Leipsig, it was 1 to 16.26

It fell in the following year to 1 to 15.04—seven and one-half per cent.; but this seems due in about equal proportions to a rise in Silver and to a fall in Gold.

But the mere fact that this rise in the Silver Price of Gold concomitant with the demand for Gold Resumption was so slight, and hence that, nominally at least, Silver accompanied Gold in its rise in England, really avails little to establish a substantial equality of the Purchasing Power of the two metals at that time, and still less to meet our question whether Resumption in Gold and Silver would not have caused less fall in price than attended Resumption in Gold.

To-day, in a world encompassed by telegraph-wires, railroads, and steamship lines, the solidarity of the money market has not done away with local and international values; the averages of prices, the general value of money follow in every country their own laws. To far greater extent was this true in 1819.

In England prices were expressed in Gold, and the Value of Money meant the Value of Gold *there and not elsewhere*.

On the continent prices were expressed in Silver, and the Value of Money meant the Value of Silver *there and not elsewhere*. The lake of Silver and the lake of Gold were joined together only by the narrow and tortuous channels of exchange—shallow channels, too, for the great mass of the Silver on the continent, and of Gold in England, under the laws of Legal Tender, must remain in position below the ordinary tides of change—and they could but feebly communicate their tidal movements to each other.

He who would judge, therefore, of the comparative permanence of value of the two metals, must inquire whether the average of Silver prices on the continent fell in the year of Resumption as the average of Gold prices fell in England.

It will not be, until this question is answered in the affirmative, that the proof of steadiness of Gold based upon the effects of Resumption in Gold will be discovered.

Until then it remains an invention.

To return to the question of the effect of using full-weight Silver in Resumption. It is plain that if there be a certain elasticity in Metallic Money, a given quantity of Silver might (leaving Asia out of the question) have been spared to England by the Western World with far greater ease than that with which it parted with its Gold.

In any case, the English lake of Money would thus have formed an arm of the sea of continental Money, and a greater portion of

the fall of Prices might have been distributed over the entire area.

It is interesting to observe that one of the arguments of the most advanced advocates of Gold-monometallism leans in this connection in favor of Resumption in Silver.

It is, say M. Mannequin and others, a characteristic of Gold that it tends to control the Price of Silver; but Silver may fall without carrying Gold with it.

Whatever of truth there is in this view is due, it is safe to say, to the fact that for a large proportion of Silver Currency, Gold is a convenient substitute; while for a small proportion of a Gold Currency is Silver a convenient substitute.

Whether this be the fact or no, one sees clearly that this argument of M. Mannequin leads straight to the view of Resumption in Silver and Gold, which we have shown by another course: for if Gold, which controls, be seized upon for a new and permanent employment, it must needs rise in Purchasing Power, and Silver must follow it; but if Gold be left, and Silver be taken, Gold remains as it was, and Silver obeying Gold, remains as it was also!

If, therefore, M. Mannequin's position be correct,—if, in a word, Gold be the keel, the ballast, or unalterable seat of the center of gravity, and controller of movements of the entire bulk of the Precious Metals,—our conclusion seems justified that it was undesirable to shift Gold bodily to one side.

A still further question may be suggested. Had the Coinage Laws of the United States and France fixed a higher value upon Gold, so that Gold, instead of Silver, had been in 1815–20 the cheaper Legal Tender in these countries, would it have been possible for England to resume Specie Payment in Gold?

Again, would it have been possible for England to resume in Gold had the Holy Alliance signalized its triumph over the aspirations of Europe by the adoption of the sacro-cæsarean metal within the domain of its police?

The questions answer themselves. It is evident at a glance that the Acts of 1816 and 1819 existed by favor of the Silver Law of Germano-Austrian countries and the Bi-metallic Law of France and of the United States.

It is to the acts of omission and commission of Continental and American Legislation that the English sovereign owes its creation and its power.

Explanatory Note.—As I can point to no distinguished authority in

support of the views set forth in this chapter, it occurs to me to add these words of explanation, in answer to a possible objection, "If this be true, why have we not heard of it before?"

It is a strange fact, but there is no broad and impartial history of the period of Restriction and Resumption in existence. A library has been written about it, but there is a controversial tone in even the most sober productions from Tooke's History of Prices to Levi's History of British Commerce.

The *saeva necessitas* of war is wont to assert itself wherever science seeks to establish its principles through political triumph, and the irrepressible conflict between Paper and Metal, which raged so fiercely in the days of Restriction, has never yet been entirely set at rest.

Now, the Resumption of Specie Payments was the pride and the glory of "the Economists," as they were called *par excellence;* and science, turned politics, was intolerant of criticism. While the main question was undecided, the Procrustes bed, "he that is not for us is against us," was set in use for thinkers, and the truth that was arrayed against the form of the measure was sacrificed for the truth that inhered in its substance.*

The attack of the opponents of Resumption upon the new Coinage System led to its defense by Peel, and in the then undeveloped state of monetary theory, Gold-monometalism was permitted to become identified with what was sound in the doctrine of Resumption.

It was mainly to this companionship that the Gold Standard was indebted for its dignity.

It was allied in men's minds with the resolve of the leading men of England that the Paper issued in time of War must be paid in full in time of Peace, and that in future Bank-notes must forever be convertible into Coin; and so, by a not unnatural confusion of thought, Englishmen came to regard the yellow and light pound sterling Coin of the Regency as something more "honest" and more "English" than the heavier white coins which had made a pound sterling in the time of Elizabeth.

Of course, when the contest of Resumption was over, the harm was done: the redistribution of wealth had taken place, and later still the new tide of prosperity swept the field.

What was done could not be undone. The new distributees of wealth were acquiring vested rights. A counter-revolution of the value of Money, while injuring the interests of all, was not likely to bring compensation to those who had lost before.

Hence, as far as the adoption of Gold was concerned, no failure of supply supervening, there was no strong reason why by-gones should not be by-gones, and the agitation for the restoration of Silver was lost sight of in the then more absorbing problem of Banking policy

* So in like measure to-day in Germany Coinage Reform has become, to the detriment of science, a fertile source of "mutual excommunication," and the United States has been assailed with the same danger.

Meantime the *auri sacra fames* held uninterrupted sway!

There is a *naiveté* in the attachment which seems to be felt for the yellow Coin; in the presence of which I feel that what I have said of the English (Gold) sovereign would seem in some quarters like lese majesty, and awaken horror as of one who had "imagined the death of the king."

O sancta simplicitas!.

The readers of Shakespeare will remember how King Duncan learns from Ross the issue of the contest with Scotland's enemies, which made Macbeth the Thane of Cawdor: and how—

> "Sweno, the Norway's king, craves composition,
> Nor would we deign him burial of his men
> Till he disbursed at St. Colme's inch
> Ten thousand dollars to our general use."

It would only be in keeping with the feeling to which I have alluded if in a "Bowdlerized" edition of Shakespeare, emended for family use, the latter line should be piously printed:

> "Two thousand s o v e r e i g n s to our general use."

And of course the feeling is as much an anachronism as the sovereign itself would be in Macbeth, or the dollar in Duncan's Kingdom.

It may have been wise policy to make the yellow metal sole unlimited Legal Tender for the period of Resumption; but neither in the reasons given at the time, nor in the argument of Gold-monometallists of to-day, if I have read them aright, can be found adequate material for assurance of this wisdom.

If the upheaval of the value of Gold, which threatens England to-day for the first time since 1816, and the alarms for the future of the British Empire in India, should lead Englishmen to study the bearing of these questions with a view to the interests of the whole people, which rule England to-day as they did not in 1816, it will, I believe, become apparent to the liberal mind that the demonetization of Silver is perhaps the only relic of the ideas peculiar to Lord Liverpool's administration, which the tide of reform has permitted still to cumber English ground.

CHAPTER VIII.

GOLD-MONOMETALLISM AND THE THEORY OF MONEY.

Locke's explanation of the Value of Money—Chevalier's criticism—Locke's theory in the light of late experience—The influence of Legislation upon the Value of Money—The substitution of Gold for Silver and Paper—The movement toward adoption of the Gold Standard in the Western World—The Gold Standard in Asia—Observations of Heer Van der Berg—Upheaval of the Value of Gold—Great saving of friction in its use as a Medium of Exchange—Prospect of Upheaval of Value denied in the argument for Gold—Question of increase of Production of Gold—The formation of public opinion in favor of Gold Monometallism—Actual increase, 1863-7—The Paris Conference and the German Handelstag—Opinions of leading thinkers—Depreciation the rule since the Discovery of America—Possibility of decrease ignored—Late opinions of Hendriks and Chevalier—Note—The theory of Money and the opinion of Aristotle.

In one of his Treatises on the restoration of English Coinage, John Locke, certainly one of the acutest intellects that have ever devoted serious attention to the subject, remarks that the common consent of man has given a value to Silver on account of its fitness for use as Coin.

Chevalier, in his great work [La Monnaie, 2d ed., p. 18], cites an opinion of Locke to the effect that this value, which Locke refers to the common consent of man, is an "imaginary value." The distinguished Frenchman, albeit his chivalric devotion to the Single Standard must have led him to revere Locke as the apostle of that principle, yet finds nothing to excuse in this opinion as to the "imaginary" value of Money.

"It is," he says, "an error which it may be permitted to qualify as gross;" and he adds, the "curious circumstance that one of the first to point out this error was John Law"

An ill-omened juxtaposition!

Time, which has dealt ill with the reputation of Law, despite his great services as a pioneer in the field of Credit, and which, while only increasing the fame of Chevalier, has treated with a certain irony his practical suggestions for Monetary Legislation, is now bringing tardy recognition to the acuteness of Locke.

In his "Further Considerations concerning Raising the Value of Money," Locke says:

"Silver is the Instrument and Measure of Commerce in all the civilized and trading parts of the World. It is the Instrument of Commerce by its intrinsick Value.

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"The intrinsick Value of Silver considered as Money is that Estimate which common Consent has placed on it, whereby it is made equivalent to all other things, and consequently is the universal Barter or Exchange which men give and receive for other things they would purchase or part with for a valuable Consideration."

Although this passage does not contain the word "imaginary," which appears to Chevalier reprehensible, the same idea is present, and in my belief justifies itself.

Silver in Locke's time occupied in a manner the position which the advocates of Gold-monometalism would now assign to Gold. Applying the theory to the facts of to-day, we may properly reason (as Chevalier indeed has done) as if Locke had said, Gold and Silver, instead of Silver alone.

For this assertion of the imaginary value of Gold and Silver is simply a recognition that the demand for and employment of them as Money is an all-important factor of their value.

The late fluctuations of these metals will, in my belief, serve as what the Portuguese call a "*desengano*," an "undeceiver." I am much mistaken if the doctrine of the value of Gold and Silver will not eventually be modified by general consent, so that it will be understood to be that general or permanent value which comes chiefly from the fact that all nations use these metals as Money, and it will be understood that a considerable part of that value will disappear should the nations cease to use them as Money.

A demonetization of any sort of Money will import then, other things remaining equal, the destruction of the proper proportion of its total value; and an increased demand, a new monetization, will, other things being equal, imply a proportionate increase of the value of such Money.

It is plain then, inasmuch as it is Legislation that determines what shall be Legal Tender, and as men desire that metal which, under the law, can be, more than that metal which can not be, coined into Legal Tender, that Legislation is an underlying and controlling cause of the value of Money.

I shall not occupy space in elaborating the argument: events have made it obvious, that while, as Chevalier says, "Gold and Silver had had a recognized value among men, it was on that account that people conceived the idea of using them for payments," yet the mere fact that a new use had been found for them gave them a new value.

And as statisticians and economists, Chevalier foremost among them, are agreed that the principal use of the Precious Metals is

in performing the various Functions of Money, one is justified in believing that, with the putting away of this use, the greater part of their value in exchange would disappear. The yearly demand of the gilder, the photographer, the dentist, and the manufacturers of plate and jewelry, would be but a small affair compared with that which is represented by the employment of these metals as Money by a thousand millions of men.

Of course, as has been shown on page 28, not more than one-half of the Precious Metals now in the hands of man is reckoned as being in use as a Medium of Exchange.

But, as we have already seen in our analysis of the Functions of Money, the use of these Metals for hoarding, as a Store of Value, as an actual Investment, is a recognized use of them as Money.

Hence, while the classification is fully justified which excludes from the title of Money whatever hoards are for long periods unavailable for circulation, and all those bodies of Metal, the form of which is not at the time the estimate is made that of simple Bullion or of Coin; yet, in reasoning upon the value of the Precious Metals, these limits of classification have no proper application.

Plate, jewelry, shrines, etc., made of the Precious Metals are, to a certain extent, objects of art or of historic interest; and to that extent their value is a result of their form, and is an individual incommunicable quality, which has nothing which can affect the value of other materials of the same kind, but of different form.

To illustrate: The crown of Charlemagne may be worth an immense sum; but it is as Charlemagne's crown, not as gold. Throw it with other Gold into the melting-pot, and the value of Gold Money at the time will determine the amount of other commodities for which the Gold of which that crown was made can be exchanged.

Indeed, the Precious Metals are, to a considerable extent, put into forms of ornament or display expressly with the purpose of using them as a Store of Value.

In his testimony before the English Silver Committee, Colonel Henry Hyde, Director of the Mint at Calcutta, testified (Report, Question 947): "The natives never invest their Money in the way in which civilized nations look upon an investment. A native, when he realizes a little money, puts it in the form of ornaments upon the females of his family, and in times of scarcity these ornaments are taken to the bankers and sold."

When they are thus exchanged, it is their availability as material

for Money which chiefly determines their value. Hence it is evident that, as has been stated, while, by allotting the existing stock of the Precious Metals between uses in the Arts and uses as Money, a convenient classification is attained; yet the Metal in use in the Arts derives the greater part of its value from its being, potentially, Money, or, in other words, transformable into Money.

The level of a lake is the limit of the forces under whose impulse showers and streams descend into it, and springs well upward in its bed; and in like manner the Metallic Money of the world, by its mass and its infinite exchangeability, controls alike the value of the Metal brought fresh out of the earth or that melted down from ancient hoards.

Of course it is also understood that the qualities which make Gold and Silver available for purposes of ornament and display, as well as for the humbler uses of the Arts, are also a *conditio sine quâ non* to their peculiar fitness for use as Money. The question is merely one of causation and of degree of value.

Gold and Silver are now raised to a certain degree of value. An ounce of Gold or a pound (avoirdupois) of Silver may, for example, exchange to-day for a ton of iron. The question to be considered is, of course—supposing Gold and Silver demonetized completely—supplanted by some better Instrument of Exchange, and used only as iron and lead are used, for how much iron, etc., would Gold or Silver then be exchanged?

If a pound of Gold or 16 pounds of Silver were, in such event, to be exchangeable for only a ton of iron, it would become evident that about 94 per cent. of the value of these metals would be attributable to the demand for them as Money.

Of course this is a mere supposition. It is impossible that both Gold and Silver can be completely demonetized, but this analysis is justified in the search for the conditions of their value.

It should also be equally clear that the assertion that Law is a potent factor in the value of Money does not imply that it is the province of Legislatures to be passing Laws, in order to affect the value of Money in one way or another.

To draw such an inference is to reveal a complete misunderstanding of the subject.

The idea of Law and the nature of Money alike demand something that is established—unfluctuating.

Now, it is a cardinal fact in the History of Mankind, that a lawful establishment of Money has taken place. All that History tells

of the economy of nations in organized society points to the use of Gold and Silver as Money, at ratios approximately steady—in other words, to an "institution," in various forms, of Bi-metallic Money. Of Bi-metallism it may be said in poetic phrase, "its line is gone out throughout all the earth; its words to the end of the world."*

The institution is imperfect in this, that hitherto it has been developed in peculiar forms in various States, while it has existed for international commerce through the unsteady balancing of the Bi-metallic stock of different States, in connection with States which maintained Gold and States which maintained Silver as their sole Lawful Money.

There has thus been an agreement between the various members of the community of mankind that all available Gold and Silver should be accepted as Money, and, directly or indirectly, the World has, through its laws, established within certain limits a settled par of exchange between the two Metals.

This phenomenon of a par of exchange is unique—distinct from price, and chiefly a creation of law—and applicable to the two kinds of Money-merchandise alone.†

Upon the "credit" thus given to Silver and Gold by the conduct of Governments are based the myriad obligations of the business of mankind, public and private, the uninterrupted fulfillment and formation of which are a condition, not merely of prosperity, but of progress, of civilization.

In other words, on the faith of this availability of the two Metals

*Of course, the antiquity of the institution creates merely a presumption in its favor. It indicates that it is something based upon the "nature of things." If any one can prove that it is best to have Gold sovereigns, crowns, napoleons, and eagles, and not to have Silver crowns, thalers, ecus, and dollars, well and good. Awaiting this proof, however, we observe that the presumptions are in favor of the institution that extends from the days of the laws of Menu to those of the section of the Bank Acts providing for issue of Bank of England notes on deposit of Silver.

Again, exchange being the great desideratum for man, and the exchanges of mankind having been facilitated in the past by the establishment of the two metals at a proper equation as Money, the presumptions are in favor of Gold and Silver. Of course, these presumptions can be overthrown. But what is to overthrow them?

A question which Gold-monometallists have thus far failed to answer!

†The par is a relation of permanent equality in exchangeability between two kinds of Money; price, a temporary relation between merchandise and Money expressed in terms of the latter. See Appendix F.

as Money, convenient portions of them have everywhere been used as an Instrument of Valuation. On the faith of their being actually forthcoming for that portion of exchanges for which they serve bodily as Means of Payment, the existing obligations of civilized man have been based.

Upon a situation like this came, in 1799–1816, the adoption of Gold and demonetization of Silver by England, the history and effects at the time, upon England itself, of which movement, are outlined in Chapter VII. The actual disturbance of the existing stock of Metal by these measures was comparatively slight. Though demanding Gold, England set free but little Silver, and the immense stock of France, balanced at 1 to 15½, stood the shock with but little difficulty.

The Silver Price of Gold rose slightly in Europe, and Prices fell heavily in England. How they stood in Europe generally, I am, I regret to say, not informed.

The situation created by the action of Germany, in 1871–6, is entirely different.

As will be seen from the figures given below,* for the bulk of the Currency, the projected "Reform" of German Coinage consists in

* The following may serve as a rough estimate of the change proposed:

Currency in Germany before 1871.:	
Total Gold, domestic and foreign Coin, and bars	$125 millions.
Total Silver, domestic and foreign, full weight and tokens	350 "
Total Metallic Currency	$475 millions.

Of Bank-notes of denominations below 100 marks there may have been $100 millions.

Proposed System:	
Imperial Gold Coinage up to present time about	$360 millions.
Imperial Silver Coinage up to present time about	65 "
Silver sold by the Government, about	35 "
Retired from circulation in addition to above	25 "

Bank-notes below 100 marks for the most part withdrawn.

What amount of Gold and Silver has been exported, or melted, or still remains in circulation, is a subject of doubt and controversy.

Mr. Gustavus Pietsch, in his testimony before the House of Commons Committee, gives £39 millions of Silver as the amount of German Coins in use in 1873. To this must be added, however, all Austrian and other foreign Silver, Coins and bars.

The Committee itself adopts a far larger sum, namely, £59 millions, as a maximum of German Coins in circulation in 1871, but says nothing of foreign Silver Coins in use.

an exchange. Approximately, 250 million dollars worth of Gold are to take the place of 250 million dollars worth of Silver.

The change is at once a demand for Gold, and a rejection of Silver. Each element of change deserves special consideration.

Following the move of England, its effect is cumulative. Not only is a new demand created for an amount of Gold equal to about 5 per cent. of the total stock in the hands of man, while about 4 per cent. of the existing Silver in the world is ordered to leave Germany, but the area in which Gold is sole Legal-Tender is doubled, and the principal area in which Silver remained sole Legal-Tender in the Western World is closed.

For the future annual supply of Gold, the demand is increased; of Silver, the demand is lessened.

Of course, if this change meant temporary displacement of existing stock; and if this displacement could be effected without a convulsion of business, countries which had Gold would simply serve the convenience of Germany by giving their Gold for German Silver, and the danger would be restricted to the minimum. But such is not the case. In order to such an exchange, a par must not only be fixed between the two Metals, but there must be a reasonable prospect that this par will be maintained in the future.

In the circumstances above set forth, this was impossible. Germany's action was that of an earthquake to the business of the world. The par of exchange between the Metals, the averages of

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Mr. Seyd, in his testimony, estimates for 1871 the Metallic circulation of Germany at: Gold, £30 millions; full value Silver, £60 millions; subsidiary Silver, £16 millions. Ten marks per head of Silver Tokens, which is the amount fixed by the Law of 1873, would give $95 million (nominally) worth of Silver as the limit of Silver coinage in the future. If the above estimates be correct, there were then in all $255 million [nominally, at the rate of 1 to 15½] to be disposed of, either by export sale by Government or melting down into plate, etc.

Now, it is evident that the Metallic circulation of Germany in the period 1876–1880 needs to be greater by far than in 1871. The Unification of Coinage has economized Specie, yet the growth of the business and the lack of small notes among people accustomed, as the Germans are, to deal only in cash, must far overbear this saving.

Hence Germany must, under the Coinage Reform, demand of Gold a greater amount than the Silver which is to be abandoned—that is, if it is to be abandoned.

The present indications are that a large proportion of Silver will be retained.

The present policy points to an enlargement of the per capita figures of the Silver Currency from 10 to 15, and perhaps 20 marks.

Meanwhile the Silver Thaler is a "three mark" piece and Legal-Tender.

Prices, or Purchasing Power of either Metal, were alike doomed to uncertainty.

The Metallic stock of France, which, in earlier days, by the Law of Legal-Tender, had maintained the parity of exchange within a few per cent. of 1 to 15½, both through the sharpening of demand for England's Resumption and through the overflow of supply from the new Mines, could not undertake this greater task.*

The proposed displacement by Germany of $500 millions was enough to threaten the security of the par, supported by the Law of the Latin Union.

And Germany was not alone in the revolution against the world's "institution" of Bi-metallic Money. The Scandinavian Countries joined her, and with them went the United States of America.

Plainly the Latin Union could not now maintain free coinage of Silver without losing all its Gold, and in this event the par between the Metals would immediately vanish, and the Latin Union would therefore remain with a depreciated Currency, and deprived of Metal current in other States. The Latin Union was hence compelled to limit, and finally to stop entirely, the coinage of Legal-Tender Silver.

The necessity thus grounded of refusing to receive the German Silver was, however, obscured in popular debate by the echoes of French agitation for the demonetization of Silver in France.†

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* It needs, I hope, no argument, after what has been said, to show that free coinage of either Metal as Legal-Tender by a nation, or combination of nations, will, under the working of human self-interest, determine the general rate of exchange of the two Metals, provided the metallic stock of such nation bear a fair relation to the displacements effected or fluctuations of demand or of annual supply of the Metals. See Reply for the Double Legal-Tender, p. 33.

† There was, of course, no lack of doctrinaires who were ready to perish with their country, if only their country would perish for them.

In England, the suicidal tendency of the revolution against Bi-metallism, which she had inaugurated, one might say, by mistake, and into which an error of doctrine was now forcing the world, was, as late as 1875, in spite of his great concessions to the reasoning of Wolowski, misunderstood by one of her most distinguished economists.

Professor Jevons, in *Money and the Mechanism of Exchange*, p. 143, says:

"The price of Silver has fallen in consequence of the German Currency Reform (to 57¾d.), but it is by no means certain that it will fall further than it has already done."

"That any great rise will really happen in the Purchasing Power of Gold is wholly a matter of speculation. We can not do more than make random

In spite of the now universal banishment of Silver as Legal-Tender from the mints of the Western World, and in the presence of a general fall of Prices, extending from 1873 through 1874, 1875, and 1876, indicating, in the altered circumstances, a general rise in the value of Gold,* it has still been assumed that there would be in the end enough Gold for the Western World, and that Asia would take the surplus Silver. But even this latter hope threatens to prove deceitful.

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guesses on the subject, and as a mere guess I should say that it is not likely to rise.

"Gold has, since 1851, been falling in value, and an increased demand for Gold is not likely to do more than slacken, or at most arrest, the progress of depreciation."

On page 149, after speaking of the introduction of the franc into Russia by way of the Finnish marc, a Silver coin of like weight, he says: "A great step toward a future international coinage is thus effected. Like changes are impossible among the poor, ignorant, conservative nations of India, China, and the Tropics generally. Hence we arrive, as it seems to me, at a broad, deep distinction. The highly civilized and advancing nations of Western Europe and North America, including also the rising states of Australasia, and some of the better second-rate States, such as Egypt, Brazil, and Japan, will all have the Gold Standard. . . .

"Asia and Russia seem likely to uphold Silver against the rest of the World adopting Gold. In such a result, there seems to be nothing to regret."

That such were Professor Jevons's views and anticipations, in 1875, is signal proof that the monetary events of the past few years are worthy of making a new era in Monetary Science. See page 102 and Appendix A.

* See discussions in Appendix D.

The occurrence of a general fall of prices in the Western World seems to be generally admitted. Many, however, refuse to call it a rise in the value of Gold, because they deny it is caused by a *scarcity of Gold.* Not being caused by a scarcity of Gold, it is, they say, one of the normal ebb-tides of business, caused by over-speculation (railroad building and German discounting of the War-fine, etc.), and in due time the *status quo ante* will be restored.

In a Memoir presented to the Statistical Congress, lately held at Buda-Pesth, by Dr. Engel, the Director of the German Bureau of Statistics, it appears that a comparison of the value of shares of German Stock Companies, in December 31, 1872, and December 31, 1875, shows a loss of about 1,100 million thalers!

The idea of restoration of the *status-quo ante* is attractive, but, as will be seen on page 69, the normal increase of exchanges demands a constant enlargement of the Money-basis, and the Western World is losing both in interest and principal, for the annual product of Gold is diminishing; the coinage of Silver was first limited and now is stopped entirely, and the nations are aiming at demonetization.

How avoid the conclusion suggested in the text?

Holland and the Scandinavian Countries join her, and the prevailing theory is that the Latin Union must follow her lead. How much Gold would these nations require?

And the United States, when it resumes Specie Payments!

And Asia?

Japan has taken the lead with her Gold coinage. Why should not China and India follow?

True, it is not probable, indeed, it is generally regarded as impracticable, if not impossible. All, however, do not take this view. The proposal has been urged with all seriousness—among others, by no less a body than the Chamber of Commerce of Glasgow.

Heer Van der Berg, President of the Bank of Java, writes, at Batavia, March 30, 1876: "A distinguished authority in Bombay has declared the adoption of a Gold Standard for India to be an absolute and indispensable necessity," and Heer Van der Berg seems to feel that the monetary question is of a cosmopolitan character, and that Asia may eventually have to abandon Silver and adopt Gold in self-defense.

"A general appreciation of Gold will be the inevitable consequence. The prices of all articles which are exchanged against Gold will fall."

"The metal which, by an irresistible force, will introduce itself everywhere as the single Measure of Value will become more and more rare (supposing the production to remain what it is at the present), and the fear does not seem to me illusory that the scarcity of Money will arrest production in general, in the same proportion as that in which it has been stimulated by the increase of the mass of the Precious Metals in the past twenty-five years."*

It is unnecessary to add anything to this picture. To an educated imagination it is a sight like that of the Gorgon's head in the Greek fable.

But what can Asia do, if it is the policy of the Western World to condemn to hopeless depreciation the chosen metal in which the values of Asia are treasured and expressed?

It is curious to observe, in contrast to this horrible picture, that, as far as mere convenience of handling and transporting is concerned, in that very Function of Money which many of those who write and speak about Money are wont to lay most stress upon—namely, its general Function as a "Medium of Exchange"—this change, so far from injuring, would only increase its usefulness.

* Letter to Victor Bonnet, in Journal des Economistes. Paris, March, 1876.

In a work already quoted, Ricardo has excellently said: "If the quantity of Gold in the world employed as Money were exceedingly small or abundantly great, it would not in the least affect the proportion in which they would be divided among the different nations. The smaller quantity of Money would perform the Functions of a Circulating Medium as well as the larger. Ten millions would be as effectual for that purpose as one hundred millions."*

And, of course, it would be ten times easier to handle, transport, and conceal. Indeed, if we compare the new order of things suggested by Ricardo with business under the Silver Standard, we find that we have gained in weight for a given value one hundred and fifty-five to one.

And yet the attainment of this "convenience," this eminent degree of "portability," would blight the existence of the generations that are now living.

Returning to the statement of the danger of an appreciation of Gold which I venture to say leading advocates of Gold-monometalism would admit to be true, it must now be frankly admitted that the hypothesis, "other things being equal," is totally excluded in their argument.

It has been maintained:

First. That the production of Gold is increasing, and will increase.

Secondly. That the amount of Coin required for employment in circulation will progressively diminish.

The latter proposition will be examined in the following chapter.

In considering the first proposition it is most important to realize the great influence which this faith in an increasing production of Gold has exerted in molding opinion in favor of adopting the Gold Standard.

The discussions for some years before 1871, notably those which centered around the Conference of Paris, in 1867, gave form and impulse to public opinion. Once moved in all its length and depth of course its *vis inertiæ* bore public opinion onward, and gave to the Gold Standard a commanding *prestige*.

So, too, in addition to the discussions at Paris, a meeting of the German Handelstag, a Convention of Chamber of Commerce, occurred in 1868, which was directly instrumental in determining public opinion in Germany.

Now, in the years 1862 to 1867, the production of Gold was held

* Ricardo, High Price of Bullion, etc. London, 1811.

to be decidedly on the increase, and the discovery of mines in Nevada may well have suggested that another California might be latent in America.

Xeller, whom we have quoted, expects much from the Pacific Railroad and the Railway across the Isthmus (p. 44), and is certain that the production of both Silver and Gold has a great future.

So, indeed, Professor Fawcett (Political Economy, p. 457, edition of 1874), though advising the insertion in long-time contracts of provisions guarding against depreciation of Gold, makes no allusion to appreciation.

The world was in fact almost justified in expecting a sudden fall of Gold like that of 1850 to 1858, while at any rate, even in a normal condition of demand for Gold, it must be remembered that the history of late centuries points to the probability of a general subsidence of its value.

So little, indeed, was the existing revolution of the relations of both supply and demand understood, that as late as 1873 we find that Professor Knies, in discussing the German Coinage Reform, says (work before cited, p. 242):

"And although we have to admit that the extension of the Gold Standard over another country, and one so extensive as Germany, is calculated to form an important factor in a rise in the value of Gold, we must at the same time admit that it is not less calculated to work against a much dreaded depreciation of Gold.*"

But in addition to the positive evidence there is also negative evidence on this point, which is very suggestive.

It is a curious trait in the discussions of the advocates of the Gold Standard that the possibility of a failure of the supply and of consequent financial difficulty is but little taken into account.

M. Mannequin, one of the most acute and uncompromising assailants of the Double Standard, which he characterizes as "absurd and pernicious (*absurde et malfaisant*); a Carlist Insurrection against the elementary principles of Money," says, in a late work: "I have never heard that the civilized world suffered from insufficient supply

* Professor Soetbeer gives the following amounts of annual product expressed in German pounds (See Quensted, Die neuen Deutschen Münzen, p. 32):

1862	379,000
1863	385,000
1864	390,000
1865	404,000
1866	412,500
1867	415,000

of the Precious Metals before the discoveries of California and Australia, and as these two countries have not ceased to inundate us with their products, nor even to threaten us with similar inundations in the future, one does not see why the Precious Metals, and Gold especially, should be wanting to-day."

In the debate in the Societé d' Economie Politique of Paris, April 5, 1876, on the Question of the Two Metals, M. Clamageran made, without contradiction, the following remark: "In fact, since the Middle Ages, one finds but one epoch in which there was a rise that was really perceptible (*un hausse un peu sensible*). At the end of the 15th century, the old mines being nearly exhausted, money became scarce, and this scarcity could not be compensated by credit which was then in its infancy (compare p. 109). This state of things lasted during the first years of the 16th century, under the reign of Louis XII. Soon after the reverse phenomenon appeared."

From such statements it would appear that the conditions of supply of the Precious Metals between 1810 and 1830, and the state of demand for Specie at that time, and the action of Paper Money upon the relation of the two had not been thought worthy of notice.

Again, M. Feer-Herzog says (in the work above cited, p. 77): "Admitting, with Xeller, that the coined Specie of civilized nations amounts to 13.2 milliards (francs) of Gold, and 6.9 milliards of Silver, and deducting 1.3 milliards for subsidiary Coin from the latter figure, we have 5.6 milliards to be demonetized.*

"Supposing only seven or eight years to be required to bring about the monetary union of all civilized nations, and it will require much more, the current production of Gold, with its 7 or 800 millions a year, will more than fill the vacancy."

Five years have passed; the production has averaged 500 instead of 7 or 800 millions, and Germany not only is still in the "transition period," but bids fair to remain in it for many years.

But even had the product been 800 millions, how would M. Feer-Herzog provide for the yearly losses, for the demands of the arts, for the demands of increasing population; nay, last and not least, for Resumption in the United States?

It is but fair to say that later utterances of advocates of the Gold Standard do not bear out the cheerful anticipations of a few years ago.

Mr. Frederick Hendriks, an English writer of known authority,

*I understand Xeller to include in his estimate Bullion used in exchanges.

whose orthodoxy on the subject of Gold may be tersely attested by the fact that he appears sincere in believing the Double Standard to be a "hybrid monstrosity, utterly beyond the pale of economic science," said in 1875:*

"It seems clear that unless the amount of new supplies of Gold be stimulated and increased by the demand, a period of ten years must elapse before the wants of all [the Western Nations, exclusive of Russia and Austria] can be satisfied."

On examining the data upon which Mr. Hendriks constructs the possibility of providing these countries with Gold within ten years, we find that he reckons with apparent security upon being able to send to the mints one hundred and eight millions of freshly mined Gold every year—and makes no provision for use in the arts and for annual loss!

Of course these predictions may prove true: as to the future it is vain to attempt argument. In Homer's phrase, "these things lie in the lap of the gods!"

For the present, however, it is sufficient to know that the annual production of Gold has been gradually diminishing, taking an average of years. To quote the words of the most distinguished advocate, formerly of Silver and now of Gold, Chevalier (Revue des deux Mondes, Aug. 1, 1876, page 639): "The fact is that the production of Gold is in the way of diminution, and not of increase."

EXPLANATORY NOTE.—Since the above chapter was put into type, it has forced itself upon my attention that the explanation of the Value of Money which is suggested in the early pages of it, and which lies, indeed, at the foundation of this essay, may find more ready assent, or at least a fairer hearing, if I explain it more in detail. It has long appeared to me an obvious deduction from what every one observes; but it should be admitted that it appears at least unsanctioned by many authorities.

For example, in a late number of the Paris Journal des Economistes (October, 1876, p. 47), M. Joseph Garnier says:

"Money is nothing but a merchandise, under the form of a stamped disc, the value of which has nothing arbitrary and official, and regulates itself like that of all commodities."

In a note, he adds: "The value of the two metals and of pieces of money is the resultant of cost of production, and supply and demand. Com-

* London Economist, Correspondence, Mar. 20, 1875. See also Jan. 31, 1874.

merce must be free to make use of them The issue of full-weight pieces should be free. Coining is made a state monopoly, or put in the hands of a few contractors, merely that agents of the state may certify the weight and the fineness, just as one certifies to the exactness of other weights and measures."

Evidently, if M. Garnier's expressions are to be taken in their literal sense, they conflict with the theory of which I have been speaking.

For my position is that the demand for the Precious Metals, and hence the local supply in one place, to the extent to which it is affected by local demand in other places, is almost entirely the product of the laws of different countries; and that the material for Money occupies so peculiar a position among commodities that cost of production is a far remoter factor in its value than in that of other commodities. Hence, it is obvious that the value of Gold and Silver is, if one must accept or reject those particular words, "arbitrary and official," to an extent of which M. Garnier's statement, in the above form at least, takes no account.

Of course I may misapprehend M. Garnier, but certainly in much of the political economy of the day, the *laisser faire* idea ' has not only invaded the province of what ought to be, but has obscured the observation of what is." I say this, of course, without disrespect to that idea itself—my objection applies only to the confounding of an ideal with an actual state of things. As long as civilized government has its finances to look after, and as long as legislation regulates contracts, so long will ideal free trade in money be impossible.

Its quality of Lawful Money and Legal Tender, and all that that implies, is, in a proper sense, a creature of Law.

The reader will not fail to note the controlling importance of the theory of Money in the decision of the practical questions before the world to-day.

If cost of production be the controlling factor in the value of Money, Gold is likely to vary with the cost of its production, and Silver to depreciate, because the Nevada mines produce it at so little cost. But if the theory which I have above expressed be correct, the main point to be regarded is to keep the demand, which law creates, in a steady relation to the existing supply. Hence, though the cost of production of Gold remain the same, and that of Silver become less, Gold may fall and Silver rise, if nations demonetize Gold and demand large quantities of Silver. Cost of production is in fact efficacious in their value only by affecting the supply, and the supply is in one sense everything: for men never have enough of Gold or Silver. Again, this theory places itself as a strong-based support to Wolowski's doctrine of Bi-metallic Money.

In order to make the point clear, I must recur to first principles. I ask the readers to consider, with me, that peculiarity of money, which, for want of a better word, I must call its "fungibility."

"Pardon must be granted," says Apuleius, "to the novelty of words when it serves to illuminate the obscurity of things," and this Low-Latin

word will at least force upon the readers' attention that there is something peculiar about commodities that are used as money.

Gold is fungible, Silver is fungible; that is, these metals are both so homogeneous that, if I get a pound of pure gold, for example, it is indifferent to me whether it be this pound or that pound, one is as good as another.

There is one peculiarity of these metals, and it is an eminently important peculiarity. It is "worth Money." B is willing to give A 110 pounds of Gold a year hence, if A will give him 100 pounds of Gold now: it is "worth ten per cent." to B. Why? A part of its value lies in its fungibility. Suppose B had to give A, at the end of the year, the identical Gold which he received. What use could B make of it in the meantime? If he invested it, how would he be sure to get it back again? Would it be worth ten per cent. under such circumstances? Evidently not.

Now mankind, in political society, since the dawn of commerce, has, with few and unimportant exceptions, recognized and, if need be, enforced this general fungibility of each of these two metals. True, it has always been taken for granted as a truism in the Law of Contract, but it is none the less there because so little is said about it.

Again, not only is each metal fungible of itself, but during thousands of years mankind have recognized, with unimportant exceptions, that these metals are mutually fungible; men have established this by local custom, by "common law," by edicts, by decisions of courts, by statutes, by the practice of government, etc.

Since the dawn of commerce it has been a prerogative of the incorporated will of political society to control and limit this admitted and universal fungibility, by establishing the ratio between the metals used as money.

In classic Greece it was numbered first among the subjects of the "Economy of a King," to know "what Coin should be raised or lowered in price, and when."

An inscription in Egypt is said to tell of an edict of the sixteenth century B. C., fixing the rates at 1 to 13½.

Livy tells of a treaty of the Romans with the Ætolians, fixing upon payments in Gold and Silver at the relation of 1 to 10. And so the line of laws proceeds till we see Germany, in 1871, announcing a new Coinage of Gold, at the ratio of 1 to 15½ of the existing Silver Coinage.

So, likewise, with the exceptions offered by modern demonetization, the Law of Contracts, from the earliest time down, recognizes and enforces this mutual fungibility of Gold and Silver.

Now, if, as we have seen, the fungibility—be it given by consent of the parties or by law—of one metal alone is "worth Money," is not the mutual fungibility of either metal also "worth Money?" Evidently it is.

And now, even if it be denied that there is anything "arbitrary or official" in the recognition by law of the fungibility of one metal (and this

point I would not urge), can it be maintained that there is nothing "arbitrary or official" in the mutual fungibility of the two?

But there is still another order of phenomena in which this idea and word fungibility, since we have undertaken to illustrate it, may be profitably followed.

"Every commodity has two uses: one peculiar to it, the other less peculiar to it. As, for example, a shoe is primarily made to be worn, but still may also be exchanged for something else."

In fact, however, shoes are constantly worn, and they are but rarely exchanged for other things.

So of most commodities; they are, in general, used for purposes peculiar to them. It is evident that this use of being exchanged for something else is not peculiar to any one commodity, but is shared by all commodities.

But for what are Gold and Silver used? For what are they "made," in the sense of being mined and purified? Are they made or chiefly used for uses peculiar to Gold and Silver—for gilding, or for jewelry or plate, or what not? Or are they made and chiefly used for this purpose which they share with all other commodities—namely, to be exchanged?

Plainly the latter. They are therefore different in this from all other commodities: that their chief use is not their primary use, as individual commodities, but their secondary use, which they share with all other commodities.

In fact, they have been given by man a position in the midst of all other commodities as the medium—the means of comparison; and they have received what we may call an universal fungibility, in this—that they are exchangeable for any and all commodities.

This is the very nature of Money. "With regard to a future exchange Money is, as it were, our security; for it is necessary that he who brings it should be able to get what he wants."

This was true at the dawn of commerce, and is true to-day. In modern parlance, "Money is an order payable to bearer, on wealth in general."

Recurring again to this matter of fungibility, we ask, is not this third sort of fungibility—this representability in all exchangeable commodities which attends Money—also "worth Money?" Evidently it is. We see, then, that the first kind of fungibility is worth something; the second kind of fungibility is also worth much; and the third kind of fungibility is evidently worth more.

Now, does the fact that the common consent of mankind has made Gold and Silver Money—an universal order payable to bearer, on wealth in general—exclude or include that there is something "arbitrary and official" in this establishment of this prerogative?

True, it is a part of what the elder jurists called "natural law."

The Jesuit, Schwartz, says, in his compilation of "Institutes" (Venice, 1760, vol. I, p. 216): "The obligation of accepting money, and of recognizing its value (speaking generally, and abstracting from circumstances), is introduced *jure gentium*."

But is it for that any the less "arbitrary and official?"

Has the Law of the different nations of the world, the Law of Contract, the Law of Legal Tender, has the practice of Governments, the collection of customs, of taxes, the assessment of Money fines, and damages, the appraisement of property for taxation or in litigation; etc., exerted any influence of omission or commission upon this universal "fungibility" or exchangeability of Gold and Silver?

And is there nothing "arbitrary or official" in this? If Shoes and Stockings were unlimited Legal Tender between men, or if the law provided taxes, fines, salaries of officers, damages, fees, etc., should be paid in Shoes or Stockings, would there be nothing "arbitrary or official" in this?

And, then, if Stockings were demonetized, what would be the effect of this change on the value of the stock on hand? Of course the reader will understand that in speaking of what is arbitrary and official, it is not implied that law can entirely destroy, nor that it can inordinately increase the value of either Shoes or Stockings, or of Gold or Silver, but that within certain bounds law can materially affect their value in one way or another.

If this be correct, the theory of cost of production, and supply, and demand, when applied to money, should, in the interest of clearness, take account of the peculiarities of this "arbitrary and official" control over demand, and over supply, in the sense of withdrawal of demand.

There is, as I have already indicated in my citation of Locke, nothing new in the idea.

Feeling, however, that I might appear to be in a minority upon this subject, it occurred to me to inquire whether Aristotle had not illumined this department of the Money Question, as well as others. The reader will understand the feeling with which I read in the Nichomachean Ethics, Book V., Chap. V.:

"Money (*νομισμα*), "nomisma," is, as it were, a substitute for "chreia" (*χρεία*), demand, or the thing needed; and, hence, it has the name "nomisma," because it is not so by nature but (*νόμῳ*) by (nomos) law, and because it is in our own power to change it and render it useless."

Is it not evident that Aristotle was speaking of the Legal Tender character which the law gave to the commodities used as Money, and which the law can take away.

If it should be suggested that the Greek *νόμος* (nomos), means "custom" as well as law," the answer lies upon the surface, that, as contrasted with "nature," the custom alluded to inevitably includes law, and, therefore, in any case, justifies me in saying, after this quotation, "*quod erat demonstrandum?*"

It is proper to add that the above quotations as to the "Economy of a King," and upon the "two uses of Shoes," and upon "Money as a Security," are also from the expressions of the Father of Science upon the Money Question.

O for an hour of Aristotle, before a Congress of the Nations!

CHAPTER IX.

CREDIT EXCHANGES AND THE ECONOMY OF SPECIE.

Belief that general adoption of Gold Standard will secure economy of Specie—Increased use of Credit as an admissable alternative—Opinions of thinkers—Dangers of this alternative in present situation of the United States—Examination of the alternative of increased economy of Specie—Hypothesis of substitution of Gold for Silver and Paper, in 1881, in certain Western Nations—Modes of economizing Specie—Prospects of Fusion of Currencies—Prospects of International Money—Prospect of International Bank Notes and Clearing Houses—Economy in Domestic Exchanges—Efficiency of Money analyzed—Relation of Money to prosperity—Rapidity of Circulation, and perfection of machinery of Credit Exchanges—Can ratio of Specie to Credit Exchanges be diminishing—General impression on this subject—Prosperity and Speculation—Example of England—Steam, the Telegraph, Clearing House, Check and Deposit systems—Home stock of Specie in Great Britain, 1844-74—Increase of population—Estimates of McCulloch—Effects of Depreciation of Gold—Effect of Bank Acts—Prospect of change—Uncovered Bank Notes on the Continent—Accumulation of Specie in periods of depression of business.

PROMINENT among the arguments for the adoption of Gold (see page 99), as the universal material for Money, is the assertion that its general introduction, by increasing the efficiency of Money, would secure an economy of Specie hitherto unattainable.

This anticipation is still further extended to confront the danger of a rise in the value of Gold, as if through this saving of Money the existing supplies of Gold could be made equal to the task of replacing the existing Silver and Paper Currencies.

Still a third count is added to complete the argument, which is to the effect that if, in the period of transition to the universal use of Gold, the wide extension of the demand made upon the existing supplies should threaten a general lowering of Prices, such untoward event can be guarded against by a temporary extension of Credit into the domain, which, in a normal condition of affairs, would be assigned to Gold alone.

In his work already quoted, M. Mannequin alludes with confidence to the institutions of Credit which, in spite of war, had extended their sphere of action.

M. Victor Bonnet is understood to base his confidence in the sufficiency of Gold, even in the event which M. Van der Berg regards as so ominous, upon Credit, as well as upon the assumed existence of immense hoards of Gold in non-specie-paying countries.

He is confident, for example, that there are some 1100 million dollars worth of Specie in France, a large part of it in the pockets of the people, stricken, as he says, with immobility (frappé d'immobilité), because of the circulation of Paper.

Inasmuch, however, as the same gentleman is represented as finding similar comfort in the imagined existence, in one of the principal Banks of the United States of a reserve of 150 million dollars, the greater part of which is Gold (!), it is safe to say that the more solid facts which are to sustain the argument are to be found in the extension of Credit.*

M. Feer-Herzog anticipates that monetary unification will have the consequence of reducing the quantity of Coin necessary for a certain quantity of transactions. The reservoir of Universal Money need not be by far as great as the sum of existing stock of National Moneys. And he suggests that an International Clearing-house would accomplish for all the nations what the Clearing-house of England does for English Commerce.

He further quotes, with approval, the plan of M. Emile Granier for the "Internationalization of the Bank-note," for a syndicate of the Banks of the Western World, whose bills, expressed in Dollars of the Union, are to pay the Clearing-house balances of the nation, and to do away with the need of transporting Gold across the borders or the ocean for that purpose.

J. Meyer, in an interesting exposition of the plan of an International Money, on the basis of 1½ grammes of fine Gold, which grew out of the so-called Private Monetary Conference, at Vienna, in 1873, confronts, with clear view, the difficulties which a rise in the value of Gold may bring to states whose present stock consists largely of Silver Coin, and likewise, and in greater proportion, to those which are under the domain of Paper Money; and, in the latter case, he suggests the advisability of continuing the use of Paper Money, or of deferring the Resumption of Specie Payment, until more fortunate conditions of the supply of Gold enable them to obtain the requisite amount.†

In the meantime, the introduction of the International Money could be partially attained by coining it to be used for payment of international balances.

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*See La Question Monetaire. Discussionà la Societé d'Economie Politique Belge, November 16, 1873. Bruxelles et Paris, 1874. Journal d'Economie Politique. Paris, May. 1876, p. 299.

†Das Münzwesen auf Einheitlicher Grundlage. Berlin, 1875.

As we have seen, Mr. Hendriks, a leading advocate of Gold in England, allowed ten years from 1874 for the completion of the reform of coinage.

As yet, however, the first actual step toward Specie Payment in this country has yet to be made, and other nations have the start of us in obtaining Gold. It would seem, then, on Mr. Hendriks' plan, that it will only be in 1886 or 1889 that our Specie stock will be complete.

It is, however, but fair to admit, at the start, in general, that, to him who regards the adoption of Gold-monometallism as an important step forward in civilization, removing the friction of the world's exchanges, as the rail and the locomotive remove and overcome the frictions of transportation, the thought lies near that, inasmuch as the friction largely consists in using Coin, and the removal of it must, in large part, consist in an increase of legitimate Credit exchanges, any difficulties of procuring the Gold which is to perform this miraculous service would be profitably surmounted by a temporary use of forms of Credit whose use might otherwise not seem desirable.

It will be apparent, however, on examination, that what is meant by this is merely the adoption, in a special form, of the traditional expedient for pecuniary embarrassment.

Roscher had already observed, in his great work, that a dearth of Metallic Money might necessitate and justify an issue of Paper Money.

"The state," he says,* "has more control over a fall than over a rise of Prices; since, in the former case, it can interfere actively by reduction of taxation and by issue of Paper Money."

To one familiar with American politics of late years, comment will be unnecessary.

This "extension of Credit into the domain of Specie"—this "issue of Paper Money"—this "delay of return to Specie Payments"—which is recognized by persons of authority as one of the alternatives presented with the adoption of Gold—what do they mean in this country, and at this time, but the abandonment of the field to Inflation, after the battle is won?

Is it not clear that, with a Banking System such as ours—which, however excellent in some respects, is not secure against the modified Suspension of Payment implied by the Certified Check, and offers no security against a Suspension of Specie Payment—with

* Grundlagen der National Oeconomie, §141.

the existing Greenback Party, and "Soft Money" Democratic Party, and "Soft-Money" Republican Party, the entrance of the advocates of Sound Finance upon a career of Credit Currency is fraught with peculiar dangers?

And this matter is all the more worthy of earnest consideration, from the fact that many of those who have hitherto been champions of Sound Finance in this country, appear utterly unconscious of this feature of the situation.

Such being the character of one alternative presented, it is peculiarly profitable to inquire as closely as may be into the nature of the other alternative, namely, of new agencies for economizing Specie, which, upon the substitution of Gold for Silver and Paper, by Powers now meditating the change, may fairly be expected to come into play.

Let us suppose, for example, that, in 1881, Germany will have succeeded in disposing of her Silver and in retaining her quota of Gold; that the Northern States of Europe and the countries of the Latin Union will have replaced their hundreds of millions of Silver with new Gold; and that Italy and the United States will have redeemed their Legal Tender Paper with Gold and their Fractional Currency with Silver tokens.

For the sake of the hypothesis, Austria and Russia may be left to Paper, while the semi-civilized world contents itself with Silver. We should also premise, in justice to the argument, that Brazil and Portugal are not to be supposed to be under Suspension of Specie Payment.

The main supposition, of course, does violence to probability, but will none the less conduce to clearness in estimating the argument for increased Economy of Specie.

Of the $96\frac{1}{2}$ millions of Gold which make the annual supply of the past five years, it is safe to say that one-third will be needed to replace the annual loss of the world, and the requirements of the arts.

What, then, are the agencies which can be relied upon to secure economy of Gold, to so great an extent that, without lowering General Prices or checking the normal increase of business in the nations affected, the difference can be bridged over between the few hundred millions of new Gold from the mines or old Gold from Asia and the thousand or more millions whose place is, upon our supposition, to be filled by Gold?

Can the Unification of Coinage be relied upon? Is there any

prospect of the occurrence of this change which, to those who labored for it, once seemed almost secure?

Certainly, as far as we may judge from the general tone of discussion and public action, it seems most probable that in the Gold Exchanges of the near future the Sovereign, the Napoleon, the Eagle, and the Crown will still occupy the field.

Despite the exertions and hopes of financial reformers, the late action of Germany seems to point to an indefinite postponement of the scheme.

Instead of striking Coins whose weight in fine Gold would have offered at least a multiple or sub-multiple of the franc, the dollar, or the shilling, the imperial Gold Coin of Germany diversifies, instead of unifying the coinage of civilized nations.

In theory, also, as well as in practice, national independence is maintained as a guiding principle of coinage; and, if one may trust the spirited advocate and apologist of the German "Münz-reform,"* the supposed demand of international exchanges for anything more than unity of metal, of alloy, and remedy is merely Utopian.

But can the "unification" of metal, which we suppose to take place, very appreciably affect the use of Coin?

The Commercial nations, including those who have held Silver and Paper at home, have always been wont to use more or less Gold in international trade. Indeed, the countries of the Double Standard have, in practice, been, as the advocates of Gold are wont to observe, for a quarter of a century, countries of the Gold Standard, the greater part of their Specie having been Gold.

The Commercial nations may, in 1881, use considerably more Gold than before, and there will be, in all these countries, a larger reserve on hand for international payments.

But, taken as a whole, international business seems to bid fair to flow, in 1881, in the same currents, if not in wider currents of gold than before.

Again, can an International Money, growing up by the side of various national coinages, and especially devoted to international business, serve to any great extent to economize Specie?

The future of this project is in no sense assured; and if it were, it does not appear that Specie would be economized through its agency to any great extent: for there has always been more or less of what is in practice equivalent to International Money. The melting of Gold Coins does not always follow their exportation, and

* Ludwig Bamberger.

the ingot and the stamped bar have long served as essentially an International Money, and it is difficult to believe therefore that the proposed change can promise any very marked reduction of the quantity of metal necessary for international exchanges.

In like manner it must be admitted that National Clearing-houses, and International Clearing-houses, and International Bank-notes, however devoutly these consummations of the Credit System may be wished, yet are hardly to be relied upon as elements in the problem now before us.

It is safe to say that the nations which we suppose to have secured a Gold Currency in 1881 will then make their international clearances by balancing bills of exchange, etc., and by Specie Shipment, as now.

We come then to what we must admit to be a promising field for the economy of Specie, to the domestic exchanges of the separate states, and the home stock of Specie which effects those exchanges:

But first a few words as to the "efficiency of Money." The data for consideration will be for a given country and for a given period:

1. The amount of Specie in the country;
2. The amount and kinds of Credit circulation;
3. The various amount of debts, prices, wages paid in Specie;
4. The various amounts of exchanges made through various forms of Credit; and still beyond these questions, it should be asked, What portion of the Specie Currency was entirely dormant, what was merely latent, what part was effective in actual payment, what as a special guarantee of Credit, and what was the rate of circulation of different bodies of Specie?

Strictly speaking, of course the problem will remain insoluble until perfection is attained in statistics; but fair estimates of some of the data are attainable, and offer valuable suggestions upon the point now in question.

In general, it may be observed that the business habits of the people have the controlling influence upon the efficiency of Money, and that prosperity and activity in business tend to increase, and depression to diminish, the efficiency of a given stock of Money.

In considering the probable economy of Specie upon the basis of a given stock, in a given nation, within a given space of time, we are therefore confronted with the question, Will the business habits of this people remain what they have been? Will these years be years of prosperity, and do they follow a period of depression or of activity?

Let us suppose, for the sake of the argument, that the business habits of the people are to remain the same, and that these years are to be years of prosperity, following years of prosperity. We now meet the obvious conclusion that, other things being equal—

1. An increase of population will require an increased amount of Specie; and,

2. An increase of business beyond the increase of population will require a further increase of Specie.

Now, prosperity implies an increase of business beyond, indeed far beyond, the increase of population.

If, then, with prosperity, a smaller stock of Specie is to be required, it appears that either

A, the rapidity of circulation of Specie must have been increased indefinitely, or

B, the ratio of Credit to Specie exchanges must have been increased indefinitely, or, of course, what would naturally be the case, that both these causes must have conspired to produce the result.

But, in any case, the existing Specie is already but the metallic framework which is strained in giving stability to a colossal structure of Credit Exchanges.

Transfers of capital from place to place, and direct purchases with Specie, are being made, while the mass of outstanding obligations are being liquidated by other obligations, simply because, although demandable, they are not demanded, in Specie.

Unless, then, this increased rapidity of circulation of Specie, which we have inferred, be secured in permanence beyond danger of failure to the country in question, it is plain that whatever economy of Specie is attained is accompanied by an increased insecurity of business in a ratio not far from the full percentage, both of saving of Specie over the former stock and of increase of Credit Exchanges over the total of former exchanges combined.

It is evident that nothing but a revolution in the business habits of the Western World could secure this rapidity of circulation of Money and perfection of the machinery of Credit, which would not only justify that immense expansion of exchanges which prosperity implies, upon the basis of the given stock of Specie, but would permit the base of the entire structure at the same time to be narrowed.

Is any such change in progress on the continent of Europe or in the United States?

Is there anything that promises the realization of such hopes?

There is, it is true, among well-informed persons, a general impression that rapidity of circulation is being attained in an increasing degree, and that Credit Exchanges are notably on the increase.

Locomotion by steam, the Telegraph, the Clearing-house, the Check and Deposit System, etc., are the powerful agents of this change.

On the European Continent, the latter agencies are in an embryonic condition, while the United States offers a wide field for the development of them all.

On the other hand, it is to be considered that there is a wide field for economy of Specie in the habits of Asiatics, while at the same time the percentage of the annual product of Silver, which they chiefly use, as compared with the total stock of Silver, is about one-half of that of the percentage of annual to total Gold product.

But all this, and more than this, may be true, and yet not contain a satisfactory answer to our question.

For prosperity means an immense increase of the sum total of values; an immense increase of production; an immense increase of exchanges; an increased proportion of men enjoying competence.

Now, the efficiency of money may increase to an extraordinary degree, and yet not equal the rate of increase of the use of Money.

What we ask is, will the efficiency of Money, in a given country, during its prosperity, increase (without endangering the s e c u r i t y of its business) to such an extent as not only to keep pace with, but to outstrip the constantly growing demands of business?

Will there be a progressive and extreme diminution of the ratio of that stock of Specie which shall be needed to give stability as compared with the sum total of business, which is expressed in terms of money?*

If it will not, then to diminish the stock of Specie is, in the proper degree, to turn prosperity into dangerous speculation certain to collapse, or more probably to bring about a fall of prices, which will check production, and abolish prosperity altogether.

In seeking for light upon this difficult subject, we naturally ask what suggestion the experience of England has to offer.

As the chosen home of the machinery for the economy of Coin; with Steam and Electricity exceptionally under command; with

* A comparison of Cash Balances paid to Credit Exchanges of the New York Clearing House from 1853 to 1876 shows that in the latter half of the period the percentage of cash to exchanges was about 4, while in the earlier half it was about 5 to the hundred. But the "C a s h" was largely paper.

fully-developed Banking, Clearing House, and Deposit Systems, it is plain that England presents to other nations an exemplar in business habits and facilities which none of the Powers now under consideration can for many years hope to equal.

True, it may be said, her prosperity is exceptionally great. London is the Bank and Clearing House for the world; the amount of business which centers in London can not be regarded as a criterion for that which even excessive prosperity could bring to the United States, to France, Germany, or Italy.

On the other hand, it may be asked: "Why not, as far as this single matter of Economy of Specie is concerned? The greater centralization the greater economy."

So, too, it may be answered: Compare England in 1874 to England in 1844; has her proportionate share of the business of the world materially increased in that space of time?

Has her business increased in a higher ratio than that of the other nations?

Admitting, however, that any definite conclusion on this subject of actual increase of exchanges is beyond our reach, it can not be unprofitable to examine the facts as far as we can discover them.

According to what seem to be most trustworthy estimates, the stock of Specie in permanent use in Great Britain, in 1844, was about £50 millions.*

In 1874, the stock of Specie in Great Britain was (including the deposits in the Issue Department of the Bank) over £120 millions.†

Let us, however, for the purposes of our present discussion, that we may understate rather than run the risk of over-stating, suppose that the Specie stock of 1874 was only double that of 1844, or £100 million.

The population of Great Britain is given in a work of authority as $25\frac{8}{10}$ millions in 1851, and $31\frac{4}{10}$ in 1871. A sufficiently close approximation, taking into account the great losses by emigration in the years preceding 1850, would give for 1844 and 1874 about $24\frac{1}{2}$ and 33 millions respectively, an increase of nearly 33 per cent.

If, therefore, business kept pace with population, and Specie with business, we might expect that the stock of Specie in Great Britain, in 1874, would be thirty-three per cent. greater than in 1844, or $66\frac{1}{2}$ millions.

* Tooke-Newmarch, II., 2, 693.

† Seyd, Geld Währungs und Bankfragen, p. 96.

These estimates are confirmed by other authorities.

But as it is, 33½ millions, one-third of the existing stock, are left to be accounted for, and we see that the ratio of actual increase of Specie is three times greater than that of the population.

Again, in 1858, McCulloch estimated the annual increase of Specie required for use in the Western nations as currency at 2 per per cent. of the existing stock of currency (500 mil. £ or 10 mil. £ per annum).*

"It is impossible," he says, "supposing this estimate not to be very wide of the mark, at present to conjecture how long the currency will go on increasing in this ratio. It may, as we have seen, be safely taken for granted that the sphere of civilization and commerce is destined rapidly to extend. But its expansion will no doubt be accompanied by various contrivances for economizing the use of Metallic Money, so that the quantity of it in circulation may not increase for any very lengthened period at the ratio above stated. If it did it would absorb an immense supply of Gold."

How, then, does the increase of the stock in Great Britain compare with the percentage given by McCulloch in 1858?‡

An annual increase of two per cent. since 1844 would give a total stock for 1874 of £90 millions, thus leaving £10 millions to be accounted for.

Attention should, however, be called to the fact that this estimate was made in full view of the inflow of Gold from California and Australia into the commerce of the Western World, and of course includes besides the demand of increasing population.

That McCulloch does not admit a fall in the value of Gold, makes his testimony the stronger. For, while in view of the Gold Discoveries he finds that the commerce of the Western World shows an average annual gain of 2 per cent., the facts hitherto developed as to England show that England gained more than two per cent. on an average during long periods both before and after this inflow of Gold.

On the other hand, a fall in the value of Gold is, in spite of minor divergencies of theory, fully established by the labors of Newmarch, Jevons, Cairnes, and should properly be taken into

* I do not understand that the annual loss by wear and tear is included in this percentage. Encyclopædia Britannica, art. Precious Metals.

† It will be remembered that (see page 25), according to Xeller, the stock of metallic Money in the Western World in 1866 was about 55 per cent. greater than in 1847. From this datum we may assume a general increase of metallic Money in the Western World from 1844 to 1874 of 75 per cent. at least.

account as an important though indeterminate factor in accounting for a large portion of the increase of Specie.

This, however, would not exclude a further and most important question, to what extent was the prosperity of Great Britain due to this redundance of the supply of Gold.

There is perhaps another consideration worthy of mention in this place. About twelve per cent. of British Coin is Token Money; the half sovereign is the lowest full-weight Coin, and there are in England, where the greater proportion of business is done, no Notes below £5.

Debased Coin naturally offers little temptation to hoarding, and at the same time offers a diminished encouragement to the accumulation of savings, being comparatively unavailable for banking purposes.*

Such being the currency with which the majority of the population have to do, an influx of Gold Coin and a rise of Prices might, amid their complex results, embrace a change in the use of Coin by the poorer classes, and an increased permanent use by them of full-weight Coin.

Are there other exceptional conditions which affect the fitness of England as a basis for illustration?

In view of the present state of the Currency controversy, it seems proper to note the peculiar features of the Bank Acts which took effect at the commencement of the period under consideration:

1. The absorption of Coin to serve as a deposit for issue of Bank-notes.

2. The limitation of issue of Bank and Country Notes (of which the former are Legal Tender, except at the Bank, so long as they remain convertible at par).

It will be asserted by some that had the "Banking Principle" been commissioned in 1844–5 to direct English finance instead of the "Currency Principle," the Specie, which in these thirty years has been locked up in the Issue Department, would have been effective as a basis of Credit, and would have made a smaller stock sufficient for metallic exchanges; and further, that a circulation of "uncovered" Bank-notes would have set free other large sums of Coin.

* This point is controverted. But see Ernst Seyd (Geld Währungs und Bank Fragen, Elberfeld, 1871, pp. 134–152), who attributes the debased condition of the poor in England in considerable portion to their false Money.

On the other hand, it may be asserted that these provisions of the law, although apparently compelling the presence of additional Specie in England, yet made that Specie all the more effectual, as keel or ballast for an increased spread of canvas of Credit Exchanges.

Views upon this subject will naturally reflect the respective opinions of the disciples of Tooke and of Overstone.

In any case, it will be necessary, in attributing any portion of the increased stock of Specie in 1874 to the limitations of the Bank Acts, to take account of the fact that the present tone of opinion seems adverse to any decrease of the stock of Specie in England.

Mr. Bagehot's work on "Lombard Street," published in 1873, is a warning of the necessity of increased reserves of Specie, and the Economist has repeatedly placed England's total annual demand upon the annual Product of Gold at £5 millions—more than a fourth of the whole; while even Mr. Hendriks expects England to absorb in the next ten years £3 millions per annum for her home use.

And in the mean time the Bank Acts stand firm.

As enforcing the application of the example of England to the future demands for Specie of the nations whose future enters into our hypothesis, it should also be remembered that the entrance of United Germany into the field of finance marks a turn in the battle of the Bank-notes in favor of "metallic" Paper; although the numerous and able German assailants of the theory of "Peel's Bank Act" make a breach in it, by the 9th clause in the German Bank Act.*

Indeed it is worth noticing that a considerable body of German thinkers reject all securities but Specie: are opposed, in a word, to Bank-notes in any form, except that of a warrant of deposit of Specie.

So also the attitude of France, the historic policy of her Bank

* The Banking Law of March 14, '75, creates an Imperial Bank, whose position and privileges somewhat resemble those of the Bank of France, but whose issue of uncovered notes is fixed at $57½ millions, while thirty-two existing local banks are permitted to issue uncovered notes to the amount of $31 millions.

For all notes issued in excess of the cash on hand (accounts are published every week), they are to pay a tax of five per cent., but they are permitted to reckon as cash not merely German Coin, Foreign Gold Coin, and Gold in bars, but also Government Treasury notes and the notes of other German Banks: no note to be issued for less than 100 marks ($23.00).

and the habits of the French people, together with the fact of France's absorption of immense quantities of Gold in the period 1850–1870, offer little that is encouraging to the prospect of diminution of the ratio of the stock of Specie to exchanges in France.

If then any portion of the millions of pounds sterling of increase of British Specie can be laid at the door of the Bank Acts, it is safe to say that the greater part of such proportion of the Specie stock of the Continental nations, as well as of Great Britain, is for the next few years at least safe from the attack of the agencies which are to secure the expected economy of Specie.

On the other hand, the future policy of the United States is enveloped in doubt.

Our hypothesis, however, demands that the United States shall possess a sufficient basis of Specie to give stability to the constantly increasing exchanges of prosperity, and we are not informed of any method of compassing this end with a stock of Specie which shall fall behind the ratio of Specie to exchanges in England. On the contrary, the fact that our population is scattered over such an expanse of territory, necessitates the use of a far larger proportion of Specie than would be necessary for the same population concentrated as that of England is.

There is, however, one branch of the situation which promises a certain abatement from the conclusions to which we have hitherto been led.

It was observed on a former page that depression of business led to a diminution of the efficiency of Money, and in our further illustration we supposed that the years of prosperity under consideration had been preceded, not by years of depression, but by other prosperous years.

But in this latter regard the illustration does not apply to the case in hand. The nations of the European Continent and the United States have suffered since 1873 a general check of productive activity.

It is therefore not improbable that under the force of circumstances, which we need not now attempt to analyze, a surplus of Specie may have been accumulated in these nations to an extent which, in the event of a return of prosperity, would for a time satisfy the demand for Specie.

The condition of the European Banks and rates of discount would seem to corroborate this theory.

So in the non-specie-paying countries, there is Specie, which is, comparatively speaking, idle, and which, if a return to Specie

Payments accompanied a return of prosperity, would develop an efficiency which might perhaps equal its own former efficiency and that of the Paper Money, which it displaces, combined.

NOTE.—The invaluable Report of Mr. Goschen for the Committee of the House of Commons, appointed to examine the Fall of the Gold Price of Silver (which has come into my hands since this essay was in type), announces the following conclusions:

"Your Committee are of opinion that the evidence taken conclusively shows that the fall in the price of Silver is due to the following causes:

"(1.) To the discovery of new Silver Mines of great richness in the State of Nevada.

"(2.) To the introduction of a Gold currency into Germany in place of the previous Silver currency. This operation commenced at the end of 1871.

"(3.) To the decreased demand for Silver for export to India.

"It should be added—

"(4.) That the Scandinavian Governments have also substituted Gold for Silver in their currency.

"(5.) That the Latin Union, comprising France, Belgium, Switzerland, Italy, and Greece, have since 1874 limited the amount of Silver to be coined yearly in the Mints of each member of the Union, suspending the privilege formerly accorded to all holders of Silver bullion, of claiming to have that bullion turned into coin without restriction.

"(6.) That Holland has also passed a temporary Act prohibiting, except on account of the Government, the coining of Silver, and authorizing the coining of Gold.

"It will be observed that two sets of causes have been simultaneously in operation. The increased production of the newly-discovered Mines, and the surplus Silver thrown on the market by Germany, have affected the supply. At the same time the decreased amounts required for India, and the decreased purchases of Silver by the members of the Latin Union, have affected the demand. A serious fall in the price of Silver was therefore inevitable."

In a later portion of the Report appears (what well might have been more conspicuously stated) the fact that the overt and disturbing acts of Demonetization by Germany took place in 1873-4, and that at that very time the United States gave notice to the world that its doors were closed against Silver.

When nations "discount" War Fines, it would seem that an announcement like that of the United States might fan the flames of a panic.

I might also add, although perhaps sufficiently obvious to any one, that if there had been no Demonetization by Germany, by the Northern Countries, by the Latin Union (for the limitation of Coinage is to a certain

extent a Demonetization), and by the United States, the increased product of the Silver mines would have been absorbed by these countries, and the substitution of Paper for Silver in the India Trade would hardly have caused a ripple in the Gold Price or the Purchasing Power of Silver.

But Demonetization once granted, the decreased demand of India and increased product of Nevada of course added an impulse to the fall of Silver; although without any Demonetization, the two combined would not have caused it to fall. Hence, although the latter two elements of the question are most important facts, yet it is after all Demonetization, which on any proper theory of causation is "responsible" for the fall of Silver.

So also it is fair to say, that inasmuch as Germany through her policy of Demonetization, as it were, compelled the other nations to demonetize, she is the efficient cause of the present situation.

On the effect of Demonetization, indeed, the Report itself speaks in the strongest terms:

"Your Committee on this point would further remark, that it is obvious that if effect should be given to the policy of substituting Gold for Silver wherever it is feasible, and giving Gold, for the sake of its advantages in international commerce, the preference, . . . no possible limits could be assigned to the further fall of its value."

There is, however, no further expression of opinion: the Committee were limited to this subject—the "Causes of the Depreciation of the Price of Silver, and the Effects of such Depreciation upon the Exchange between India and England."

The reader will understand clearly it is not Depreciation of the Purchasing Power of Silver, it is the lowering the Gold Price of Silver, which the distinguished Committee examined.

It is also interesting to observe that they reckon expressly upon the United States "coining full weight Silver," but "only on a contracted scale, and only available for Legal Tender for a limited amount."

Nothing of course could be said in the Report upon the prospect of England itself undertaking a share in the restoration of Silver.

The tone of the Report, however, and the expressions of some of the distinguished witnesses who testified before the Committee, indicate that the dogma of Gold-monometallism has by no means so strong a hold upon opinion in tone-giving circles in England as has been supposed.

When Mr. Bagehot observes (Question 1389), "Silver is the normal currency of the world," one is deterred from anticipating an English crusade against Silver, and indeed, if Englishmen can be found whose courage is equal to the task of consistently carrying the reasonings and admissions of the London Economist into action, Silver will be, ere long, again Legal Tender in England.

CHAPTER X.

MONETARY TREATIES AND MONETARY REFORM.

National self-interest, and the need of contract—Present attitude of the Great Powers—Monetary Treaties and the German Coinage Reform—Bamberger's "Reichsgold"—A Defense of Gold-Monometallism and the Demonetization of Silver in Germany—The situation in Germany—Bamberger's argument on Monetary Treaties—Money Circulation and the circulation of the blood—The Germano-Austrian Treaty of 1857—The Latin Union—Fusion of Currencies and Mutual Legal Tender—The limit of Monetary Unification—Treaties for Bi-Metallic Money—Bamberger's argument for Unity of Metal—The Mathematician and the Economist—The future of Gold-Monometallism—International Union and Bi-Metallic Money.

In the introductory pages of this essay I have adverted to that need of concert of action in the Monetary Legislation of the nations which the events of the last three years so clearly demonstrate.

My attempt to present the main features of the situation would therefore be incomplete if I failed to call attention to the relation of Monetary Treaties to Monetary Reform.*

For it seems probable that this "union and mutual support," if brought about at all, will require, like other advances in civilization, some legal sanction to give permanence to this "disposing mind"—this inchoate *aggregatio mentium*—which a sense of common danger has aroused.

But the way is new. The management of the circulating medium of a nation has been treated as a matter of internal administration, and has rarely become the subject of international contract.

Independent self-sufficing action, directed solely with a view to the supposed self-interest of the legislating nation, has been the rule.

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* In a late meeting of the American Social Science Association (at Saratoga, September 6, 1876), the reading of interesting papers on the "Silver Question" was followed by a general debate, in the course of which the suggestions of an International Conference and of Treaties for Bi-metallic Money, as well as of the general views set forth in this Essay, were briefly presented by the writer. See Appendix II concerning the views of Mr. Balch, of Philadelphia; Mr. Walker, of New York; Mr. Nourse, of Boston; and Mr. White, of Chicago.

The first public mention in this country of a proposal of an International Congress was made, unless I am mistaken, by Senator Jones, of Nevada, in the Senate, April 24, 1876. See Appendix K.

This was, as we have seen, eminently the case with England in 1816, and in 1876 the various nations of Christendom seem inclined to pursue the same policy.

Each nation is observing the other with a view to defensive, if not to offensive action; and the latest product of Evolution, the self-conscious Body Politic, wielding the polite weapons of financial legislation, lives like the Ishmaelite of pre-Christian days, his hand against every man and every man's hand against him.*

Certainly the gap is wide between a state of affairs like this and the dream of the "Confederation of the World"—a "Parliament of Man"—or, to translate it into narrower and prosaic language, the owners of the Planet Terra going into Committee of the Whole on the question of Money.

And yet all are glad to dream that "one touch of nature makes the whole world kin," and the universal danger to prosperity appeals to motives in man of every race and station, the force of which is as stable as it is strong.

In the few pages I shall devote to this subject, I can, I believe, best suggest to the reader an outline of the situation by introducing him at once to the controversy which naturally arose in connection with the late action of Germany in changing its Money System. A favorable opportunity for doing this is offered by late utterances on this subject of a gentleman who has the reputation of being the author of some of the Laws which brought about the German Coinage Reform.

The most notable experience which the nations have gathered upon international contracts on the subject of Money is that embodied in the Monetary Treaty of 1867 between Austria and the German States, and in that of 1865 between Italy, Switzerland, Belgium, and France.

On the other hand, the most notable instance of the dangers to which the neglect of such considerations exposes them is that which the attempted substitution by Germany of Gold in the place of Silver has occasioned.

The utterances of Herr Bamberger are therefore peculiarly en-

* Professor Knies said (Geld and Kredit I. 257), in 1873: "We believe that France and its allies, immediately after payment of the War-fine to Germany, will abandon its present Monetary System, and that, for that very reason, Germany ought to make no further delay in completing her adoption of the Single Gold Standard. Till that period, the Double Standard will remain in practice in France."

titled to consideration, on account of the central position which he obviously occupies with reference to the entire question.

The work to which allusion is made bears the title "Reichsgold," which, to a German, must suggest inspiring memories of "Rhinegold," and call up in a shadowy manner some analogy between present conditions and the fabled Hoard of the Nibelungs enshrined in Teutonic song.

The book was written in 1875, and had reached a third edition early in 1876.

In his closing chapter (p. 198), the author gives the following account of the genesis of the work:

"When, about midsummer of this year (1875), the German Coinage Reform became the subject of a feeling almost of despair, the resolve to overcome this feeling put the pen into my hand.

"A triple object was to be attained:

"First, in view of the obvious fact that conviction [on this subject] had not yet been firmly enough established, my task was to prove from the outset, by clearing up the principles involved, the necessity and the propriety of our great undertaking.

"Then, to restore confidence in its final success.

"And, finally, to urge strenuously that this transition state, from which this uneasiness had proceeded, be put out of the way as soon as possible."

The following titles of chapters will briefly indicate the scope of the work:

2. The Exportation of Gold from Germany neither caused nor made more easy by the Coinage Reform.

3. Neither the necessity nor the possibility of Exportation of Gold brought about by the Coinage Reform.

4. The ability to emigrate to foreign countries a fundamental condition of all good Money.

5. The Utopia of Universal Money and Monetary Treaties.

6. The Unity of Metal the only practicable and proper realization of Universal Money and subject of exchanges.

7. The proper limit for Variety of Money in Unity of Metal.

8. The sensitiveness of a Money System a symptom of its soundness.

10. The Single Standard a result of the Unity of Metal.

11. Ravages of the Double Standard.*

12. Wolowski's Theory.

* "Verheerende Wirkungen der Doppelwährung!"

18. Germany's share in the causes of the Depreciation of Silver.

The curious reader will observe that the "great undertaking' whose propriety these and the other chapters are intended to prove, was not what all will recognize as truly a "great undertaking," namely, the Unification of German Coinage, the substitution of one centralized system in the place of a score of sectional systems.

The necessity and propriety of unification, of union and mutual support which this great undertaking implies, requires no proof whatsoever. It is as apparent as the sun at noonday.

That which, however, eminently does require proof is the special scheme or form of the new coinage system, which the reformers, Herr Bamberger at their head, carried against all opposition through Parliament and Privy Councils.

It is the peculiar all-overshadowing feature of this scheme, that only one metal shall be Legal Tender, and that metal Gold.

A glance at the titles of Herr Bamberger's chapters will at once show clearly that it was this peculiar feature of the system that had alone brought Germany to the verge of despair.

It was not unification of coinage, it was not the abolition of the seignorial rights of coinage of the different German States, it was not that the mark was made the Unit of coinage, which caused distress and alarm.

It was not upon these subjects that public opinion was not "clearly convinced."

It was not the "final success" of these features of the Coinage form, in which "confidence" required to be restored.

On the contrary, the eyes of the German Public are evidently turned to this attempted substitution of Gold for Silver, in which, of all other features of their policy, the Legislators of the New Empire had taken pride, but which to many men of common practical sense and of science as well, had seemed from the first not merely an unnecessary feature, but a fatal defect in the armament of reform.

True, it was a grand move in the duel between France and Germany, but if Germany had introduced the Teutonic element into the Latin Union, this final establishment of Bi-metallic Money would have put an end to their contest in this field. But not merely the adoption of the franc, but the Bi-metallic Standard also, were put aside by Reform when Germany entered the arena to struggle for

Gold. France accepted the challenge; and by the policy of late years has helped to tie the hands of Germany.

In the meantime, depression has weighed upon the productive industries of Europe.

Such being the situation, and the tone of public opinion in Germany being what Herr Bamberger describes, we must remember that in undertaking the task of defending Gold-monometallism against all comers he is really fighting *pro aris et focis*.

We should add in justice that he does his work with an aggressiveness and dash worthy of the best of causes. His book is a novelty in monetary discussions—a very Charge of the Light Brigade—

> "Theirs not to reason why,
> Theirs but to do and die!"

"Monetary Treaties," says Bamberger, "belong to that order of contracts which are as contrary to the nature of International Law, as the Contract of Slavery is opposed to the Rights of Persons.

"A man can not alienate his freedom by contract, and a State can not alienate its freedom by a Monetary Treaty.

"In its Monetary System lies the principle of its bodily and spiritual existence.

"Its Circulation of Money is like the Circulation of Blood, one of the fundamental conditions of its preservation, and to chain this necessity of one's own existence to the existence of others is as pernicious as it is impracticable."

In justice to this picturesque analogy of the circulation of Money and the circulation of blood, let us hasten to observe that this is not a mere trick of rhetoric. By no means. For, apart from other reasons, there is a Money which will really circulate in the manner suggested by Herr Bamberger—that is, in the national body, not out of it. This Money is cheap, too. It can be had at the minimum of expense. There is no question of stock on hand or annual product. All that is required is a printing press, ink, and paper.

The United States adopted the idea in 1862, and after fourteen years still contains statesmen to whom this analogy of the circulation of the blood is a trusty ally in the cause of "national independence" of Money circulation.

France, also, has of late, with an inspiration of genius, been making this sort of Money its servant in preventing the exportation of French Gold to Germany.

It would, however, be doing Herr Bamberger injustice not to

say at once that, being a man of science, he is no more than Léon Say a believer in Paper Money, and that, in his discussions of the mechanism of exchange, his acuteness and knowledge are only equaled by the brilliancy of his style.

A reference to chapters 2, 3, 4, and 8, of Reichsgold will reveal the fact that, to his mind, the fundamental condition of good Money, or life-blood, is that it should be able to circulate outside of the body to which it belongs.

From this, of course, the distance is not great to the familiar view, suggested in the introduction of this essay, that the World is the one Body whose Life-blood is Money Circulation, and that the nations are the different members of this Body. I would further add that they are at present in a state of revolt, with results closely resembling those set forth in the well-known fable of Æsop.

But it will be asked, Why, then, this onslaught upon Monetary Treaties?

For answers to this question, I can only refer the reader to the perilous situation in which the German Coinage Reform has placed Herr Bamberger. It will be remembered that he is under fire. He has assumed the task of proving the necessity and propriety of Gold-monometallism. Moreover, there are motives of patriotism for his position on the subject of Monetary Treaties.

Königgrätz put an end to the Austrian Treaty of 1857, and Germany is annoyed with Austrian Silver gulden and thaler pieces, which Germany is obliged to keep in circulation at home, in place of Gold that is going across her borders, in obedience to the principles of chapters 4 and 8. Again, France is the head of the Latin Union, and Bamberger says (p. 40)* "that all that prevents the other states of the Latin Union from withdrawing from the Union is a feeling of political dependence on France, who would be sorry to see this remant of her supremacy torn away, and to whom the sympathy of the Catholics who are at the helm in Belgium gladly brings this tribute, while the ruling party in Italy is inspired with the same sympathy, and she, in her own helpless embarrassment, with her debt and her Paper Money, takes no interest in annulling a Treaty, whose tattered folds serves to cover her own nakednesss with a remnant of respectability."

* "Da schwur er beim Eisen,
Gar zornig und hart,
Dem Franzmann zu weisen
Die deutsche Art!"

It is, I think, plain that, in his peculiar situation, calm reasoning as to the capabilities and future development of Monetary Treaties is not to be expected, even from a man of Herr Bamberger's genius.

But it is only fair to point out, in his digression, for it is but just to say that so he calls it, upon the Utopia of Universal Money and Monetary Treaties, it is plain that he is speaking of the one as connected with the others—that is, of Monetary Treaties which contemplate a Fusion of Currencies. Hence the objections already noted to the German-Austrian Treaty of 1857. But the force of this objection is somewhat modified by the fact that the trouble was caused mainly by this—that, after the treaty was nullified, Germany abandoned Silver and adopted Gold-monometallism.

So, likewise, the criticism upon the Latin Union is one-sided as it is caustic. "It had not lasted five years," he says, "before three of the states saw themselves compelled to break it." France and Italy suspended Specie Payment; Switzerland was compelled, during the Franco-German war, to give currency to English sovereigns.

Greece and Italy coin tokens, and they are sent, at a profit, to France for circulation, so that some of the states suffer just as Germany does from Austrian gulden and thalers.

Hence, to use Bamberger's expression, "a treaty between a few neighboring states became, within a few years, a knife without a handle, and without a blade."

And he quotes Kern, Feer Herzog and Frère-Orban, to show that the original treaty of 1865 is practically abrogated, and the so-called supplementary treaties, made in 1873 and since, are really "brand-new treaties."

From these premises, he concludes that all Monetary Treaties "spring from an abstract idea remote from fact." But what he means is, of course, all treaties which ordain a Fusion of Currencies, and notably where there is a coinage of Silver tokens.

But it is obvious that the statesmen of these countries which made the Treaty of 1865, and still more those who have made new treaties, if such they be, in 1873 and since, not only must have had some good reasons for making those treaties, but also reasons which overbear the disadvantages of which Bamberger speaks.

A judgment as to the good and evil results of the Treaties of 1857 and 1865, and a statement of the balance, is therefore, in spite of Herr Bamberger's argument, still to be desired.

The remainder of the chapter of Bamberger's work is devoted to reasoning in the same narrow circle:

"To conclude a Monetary Treaty is to bind one's self never to suffer war, revolution, or a bad harvest!" Why? Because either of these might bring a Suspension of Specie payment.

Again, of the common circulation of Coins he aptly exclaims: "What irony in a currency which at Paris is coined with the motto, 'Dieu protége la France' (that is to say, God is to restore us Metz and Strasburg), and at Berlin, with the motto, 'Gott mit uns' (that is to say, God will help us to set your plans at naught)."

"For the Universal Money (Weltmuenze), the time will not come until the motto can be, 'God protect the World.' When that time will come, the Peace Congresses may decide."

While acknowledging the force of the author's remarks on Fusion of Currencies, or "Mutuality of Legal Tender," and without attempting to discuss the question of International Money, I will simply note here that difficulties growing out of a Token Coinage, or a subsequent substitution of one metal for another, are not inevitable and inherent in the subject, however they may have infected the two Treaties discussed; and that as for Suspension of Specie payment, the thing requiring proof is not whether, in case of suspension of one ally, the others suffer, but rather whether they suffered more than they otherwise would have suffered.

Passing by, then, the question of Treaties, which chiefly aim to secure a Fusion of Currencies, we come to the consideration of a Treaty simply providing that each contracting party for a certain time will make and keep Gold and Silver at a certain ratio, Legal Tender, for all sums, and will maintain free coinage of both metals, reserving the privilege of coining its Silver and Copper Tokens as it shall please.*

* Of course, among the possibilities of the present situation, Unification of Coinage will naturally occupy a prominent place in the minds of thinkers, if not of Legislators; not necessarily, however, with the idea that the "unifying" nations are called on to admit other's Coins as Legal Tender, but with a view to simplifying accounts, and to the use of certain "Trade" Coin as a medium of exchange with other nations.

Unification implies of course that some nation must alter its present Unit, although the German writers accuse the French of limiting "Unification" to the adoption of the franc!

The four-shilling dollar, one-fifth of a sovereign (the introduction of which is advocated in England), and the five-franc piece are prominent candidates for the choice of the Coinage Reform in this direction.

Let us suppose then that the chief powers should join in an International Conference, and form a mutual compact to this effect.

It would seem safe to assume that it need be no part of the effect of such a Treaty that the Coins of the contracting parties should have a circulation outside of the country of their creation appreciably greater than they now have, and that the control of each nation over the counterfeiting of its Coins would be as efficient as it now is.

If this be true, such a Treaty would therefore not conflict with Bamberger's chief demands for the interest of "national independence of money circulation."

Would it involve a limitation of independence in other directions? Certainly it is not apparent that the situation under such a Treaty could, in any conceivable event, be made worse than it is. Why should the effect upon other nations of a bad crop, of a Suspension of Specie payments, of a war in one, be increased by an agreement of the nations to make Gold and Silver Legal Tender at the same ratio?

On the contrary, it seems, certainly at first glance, that the effect of such an agreement would be to guarantee as far as it is possible the other nations against a financial or commercial shock.

The probabilities, in fact, are all in favor of the belief that this supposed agreement of the nations to use the two metals as one Bi-metallic Money would give to the Money of the world that elasticity which is needed to secure stability.

Would not such Treaties, in fact, realize what Herr Bamberger himself admits to be his ideal of the Money of the future?

"It is true," he says, "that Universal Money of metal is fully justified as theory,* but the only mode of realizing this theory leads precisely to the path which the German Empire has trodden, namely, to provide a Money calculated to have † the same value and currency in the entire world."

"He who looks only to the outward appearance of things believes that he can reach this goal by proposing to give to the Coins of all countries the same imprint and the same denomination."

"But the true solution," he says, "is Unity of Metal, and of course with this should go Unity of Alloy, and, as far as feasible, Unity of Remedy."

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* Auch die wirkliche Weltmünze aus Edelmetall hat als Gedanke ihr Berechtigung.

† Geltung.

But, we ask, is not this Unity of Metal substantially attained by the consent of the nations to use the two Metals as one Bi-metallic Money.

True, as the reader has observed, the perfection of the quality of "one-ness," of "unity," is lacking, but the reader must also consider that Herr Bamberger can not take umbrage at this. He knows that this is not a question of abstract science, of mathematical unity: it is a practical matter, and the real question is not whether one-ness, unity, of Money throughout the world is attainable in perfection with Bi-metallic Money, but whether Permanence of Value and the security of being receivable as a Means of Payment throughout the world, is not attainable in a greater degree through the adoption of Bi-metallic Money than through the adoption of the stricter "unity" of Gold.

In answer to the reproaches cast by various critics upon Germany for choosing as her new Unit a Coin standing in no simple relation to the French Metrical System (which is based on the circumference of the earth, and has been adopted in the greater part of its surface), Herr Bamberger excellently says:

"What misleads them to make this *salto mortale*, this break-neck leap from the meter and the kilogramm to a piece of Money, is simply this, that they are mathematicians; that is to say, people who live merely among the abstract ideas of measures, which in themselves are without substance; and when they speak of Money, they are thinking only of the form, not of the object.*

Hence, by his own reasoning, we say, Herr Bamberger should be led to the admission:

First, that it is desirable that the whole world should unite upon a Unity of Metal, and therefore this Unity of Metal must be such that all the Commercial Powers, including those of Asia, can partake of the benefits of its use.

And, secondly, that it is a purely practical question whether substantial Unity with Bi-metallic Money is more for the interest of the world than Mathematical and Metrical Unity with the adoption of the Single Gold Standard throughout the circumference of the planet.

But no one believes that the universal adoption of the Gold Standard by this generation is possible.

* This criticism applies with singular felicity to the action of the American Academy of (Natural) Science at Buffalo, August, 1876, on the Single and Double Standards.

To those who have considered the question it is evident that the change, if consummated, would be a general winding up of civilized nations. Each would require to be put in the hands of a Receiver, and the Government would become a Court of Bankruptcy or a Court of Repudiation, as the Gold monometallist may choose to name it.

The Parliament of Man would then be ready for dissolution at the order of the Register of Bankruptcy who could command the best artillery.

On the other hand, the adoption of the Bi-metallic Money by the Great Powers is, humanly speaking, feasible, and promises to harmonize the interests of nations, which the worship of golden portability has endangered, to restore the orderly march of prosperity, which has been interrupted by the undignified "steeple-chase for Gold."

Returning to our hypothesis of a Treaty of the Great Powers (including India with England), it would seem that upon the general establishment of free coinage in either metal, and Legal Tender character of both, the metals would "find their level," so to speak, in all countries. Business on a large scale would be done with Gold; that on a smaller Scale with Silver.

If such a body of nations agree that they will accept one as a substitute for the other, at the same ratio, there can be little question that the market rate will substantially conform to the legal value.

This position of Wolowski's is impregnable.

Bamberger eludes the hypothesis by denying that the nations will agree!

Professor Knies maintains with some force that in one nation, in the case of a permanent and far-reaching change in production and amount of the two metals, the market value will override the legal value; and why not, he asks, in the entire world?

But, granting the correctness of the conclusion suggested, the supposition is so improbable as to be of no practical moment*

* So one might suppose a shower of ærolites of solid Gold falling in various parts of the earth at the time of a complete failure of the Silver mines, or *vice versa!*

Suffice it to say, that Wolowski's position would stand the shock of a second Siberia, Australia, California, or all combined.

The annual product of Gold in 1853 was more than four times, and the aver-

Apart from the impossibilities below suggested, the equation thus established by the gravitation of human self-interest, regulated by Laws of Free Coinage and of Legal Tender, would be unalterable by any fluctuations of production of the Precious Metals.*

age annual product from 1852 to 1876 was three times that of 1846, and yet the relative value of the metals was disturbed by a very small percentage.

As for the present situation, the annual product of Silver in the last five years is only double that of 1846, and the average percentage of Silver in the total annual product of the Precious Metals is less by one-sixth than it was in 1846.

But with old Silver for sale and new Silver refused at the mints, Silver has touched 20 per cent. discount.

Of course, if the leading nations had supported France in the ratio of 1 to 15½, the period 1850–1870 would not have witnessed even 3 per cent. disturbance of the legal ratio. (See Chap. VIII. 101.) It is evident, on consideration, that so long as men can get the scarcer metal by giving the more abundant metal at 1 to 15½, the price of the scarcer will not rise above that of the more abundant metal. In other words, so long as both are current as money, so long will the legal equation prevail.

To break up the ratio of a union of the nations, it is necessary that one of the metals should cease to be current as money, which implies, of course, that man should suddenly lose the greater part of existing Gold or Silver, or else proceed to use the entire stock of one of them in the arts.

But this event is no less improbable than the discovery of the Philosopher's Stone, and when the golden treasures of Troy and Mycenæ are being uncovered, the dream of alchemy seems hardly more improbable than the hypothesis of loss of the Precious Metals. The Philosopher's Stone would, in practice, demonetize both metals by that well-known instinctive demonetization which, under proper circumstances, leads to the use of Paper Money as material for kindling fires.

Man would turn alchemist, and make Gold or Silver, or both, so plentiful that one or both would cease to be used as legal tender.

But be there loss or increase, contraction or inflation, so long as both were current as money, so long would the legal equation prevail.

*In a late number of the Journal des Economistes (December, 1876), I note a letter of Professor Walras, of Lausanne, upon this subject, which appears as a criticism of M. Cernuschi's "Silver Vindicated," with the reply of M. Cernuschi.

Professor Walras' reasoning, clothed in mathematical formulæ, rests, as M. Cernuschi shows, upon the supposition that the value of money-merchandise is distinct from the value of money, which M. Cernuschi denies. It is important, however, to observe that the substance of Professor Walras' letter hardly warrants the form of criticism assumed in it. From these explanations, it follows, he says, that the adversaries of M. Cernuschi deceive themselves if they affirm absolutely that "to promise the irrevocability of the 15½ is to promise the impossible." "This irrevocability is possible in certain limits without prejudice to freedom of competition," says Prof. Walras. And what are the limits?

The only remaining danger would be that the nations might prove false to their faith; that the Treaties might be broken.

Of course the same objection would apply to Treaties in general; and yet Treaties have been made and have been observed. It is safe to say that the great majority of contracts, public and private, are honorably fulfilled. So Treaties for Free Coinage of Bi-metallic Money might pass this objection with the average.

Of course, if need be, they could be made for a term of ten years, subject to withdrawal at pleasure at the end of the term.

But, after all, why should any one wish to break them?

The recalcitrant party would be outlawed as an enemy of the race. Demonetization would assert itself in the consciousness of civilized man as a sort of National Piracy.

But, beside this, what could such nation gain by breaking the Treaty?

Has the situation of the British-Indian, or of the German Empire, been so attractive as to invite imitation of their policy?

The same as those I have above suggested—when, namely, the demand for use of either metal as merchandise removes it from use as money.

But this is as conceivable and as possible as the Philosopher's Stone. The letter is therefore an admission from the author of the *Elements d'economie politique pure*, that M. Cernuschi is right, and that his adversaries are wrong.

It is also a fact most worthy of attention that Professor Soetbeer, in an article in the *Neue Freie Presse* (October, 1876), in criticising Dr. Hertzka's incursion into the field of monetary discussion, in his "*Wahrung und Handel*," lately published, expressly gives his adhesion to the opinion, that if the great nations establish free coinage of either metal as a legal tender at one ratio, the metals will not vary appreciably in price. (See Appendix I.)

So, too, Professor Jevons and H. D. McLeod have expressed to M. Cernuschi their assent to this proposition. When Soetbeer, Walras, Jevons, and McLeod agree with the bi-metallists, what more is there to be said?

M. Esquirol de Parieu, Vice-President of the Council of State of the French Empire, in his report as head of the Monetary Commission of 1869, in which Wolowski was so often in a minority of one, said:

"This equation established by the legislator between a gramme of gold and 15½ grammes of silver, does it not seem impertinent (temeraire) in the presence of the economical ideas of the day upon the general cause of the price of things—namely, the relation between supply and demand?

"That, at an epoch when the movements of production or of circulation were less rapid than to-day, and when also men had still a remnant of faith in the power of the legislator over the facts of commerce, men could believe in the permanence of a legal equation between the two metals, is, it may be admitted, comprehensible; but to-day, to rate one of the metals by the other is a conception of legislation which is repelled by the consciousness of economic laws."

Evidently, since 1869, the logic of events has been cogent—the labors of thinkers have not been in vain!

CHAPTER XI.

THE CONDITIONS OF SUCCESSFUL RESUMPTION OF SPECIE PAYMENT BY THE UNITED STATES.

The meaning of "Successful" Resumption stated—General Conclusions established by this Treatise—Necessity of a steady par between Gold and Silver—Dangers to America of the continuance, in Europe, of the Policy of Demonetization—The True Policy of the United States.

WE have now attained a position from which we can sum up the results of our investigation, with a view to their practical application to the present situation of the United States. We ask, then, what are the conditions precedent for successful Resumption of Specie Payment?

I say successful Resumption, for the interests of the people, as well as the honor of American statesmanship, demand that approach to the minimum of unfavorable, and to the maximum of favorable results, which, in so arduous an undertaking, is worthy to be called success.

As a basis of discussion, I shall assume that 375 millions' worth of Legal-Tender Paper (including fractional currency), are to be canceled and withdrawn, and that the existing non-legal-tender currency of National Bank notes is to continue in circulation. The currency will then consist of Specie, and notes issued on deposit of bonds, and convertible on demand under strict penalties.

Success in Resumption ought, of course, to carry with it the certainty that this convertibility of the non-legal-tender currency should be permanently secured.

We shall need, therefore, coin enough to serve as the basis of prosperity, as the foundation and framework of a colossal structure of exchanges, whose security depends upon the proper admixture of Specie to credit—of Specie itself, among the endless transfers of titles to the ownership of Specie.

How much Specie, including change, will be needed—in 1879, we will say?

With the present double standard of Gold and Paper, there are in the country about 525 millions of Legal-Tender.

The Gold, however, is the only unlimited Legal-Tender, the

Paper not being Legal-Tender for customs dues, nor payable by the Government for interest on the public debt.

But Limitations of Legal-Tender are alike in this, that they obstruct the efficiency of Money.

It is to be hoped that half-measures of this kind, which belong to an order of opinion now obsolete, will absent themselves from legislation, and that the lawful Metallic Money of the United States may be made universal and unlimited means of payment.*

In this event we may, for the present discussion, assume that $450 millions of specie will safely serve the business of the country.

We may further assume that an average annual increase, for the present, of some three per cent. will suffice.

The country already possesses $120 millions of Gold, and $20 millions of Silver. Whence and how are the 310 millions, and the annual increase, to be obtained? And by what measures are these millions, with the existing Specie, to be substituted for Paper?

Success means that this Specie shall neither be obtained nor substituted for Paper at the cost of a serious disturbance of the equilibrium of business, nor shall its accession be accompanied nor followed by a great general upheaval of the value of Money.

It means, in a word, that the lessons of the example of England, in Restriction and Resumption, shall be understood and acted upon by American statesmen.

As to the particular measures to be taken for the substitution of Specie for Paper—whether it is desirable that the Treasury redeem the greenbacks in coin, or whether the Paper should be funded and the banks compelled to bear the burden of Resumption—this order of questions I shall not attempt to discuss.

The title of this treatise points merely to the question of Silver and Gold and their relation to the Problem of Resumption.

Shall the $310 millions to be added to the $140 millions, be of Silver or of Gold? or shall they be of the two metals together? Under what system and under what guaranties shall the coinage of Money-metal proceed?

I have endeavored, in this treatise, to set forth the facts which command the answer to these questions, and the theory which is the logical structure and inter-connection of those facts.

To one who has followed it thus far, the statement has itself already suggested the nature of the answer and its justification.

* Of course this is apart from the question of the payment of the Bonds. See Chapter VI, 1.

The following conclusions have become apparent:

That Civilization has been dependent upon a regulation, by law, of Money, which is an instrument for making exchanges in Space and in Time, without which division of labor, the certainty that labor will have its reward, and the satisfaction of the progressive needs of man, would all be impossible.

That prosperity, not merely of a nation, but of the world, is dependent upon a wise constitution of Money.

That the use of Silver and Gold as Money, is an institution not of a nation, but of mankind; and the existing scales of prices, of debit and credit, expenditures, investments, and of valuations of property in general throughout the world, are dependent upon this past *consensus* of mankind as a totality to use existing Gold and Silver as Money.

That for Mankind, as a whole, to demonetize either metal would be suicidal.

That the injury done by the demonetization of either metal, within the borders of a single nation, depends upon the less or greater disturbance, through the displacement of metal, of the equilibrium hitherto maintained, and the amount of exchangeability of existing Money thereby temporarily or permanently destroyed.

That the total amount of exchanges made possible by Money depend largely on the mutual fungibility of Gold and Silver, and that this mutual fungibility is only made practicable by the maintenance of at least an approximately steady par between the two metals.

That the existence of a steady par is chiefly the resultant of laws of Legal-Tender, the nominal par itself being a creation of the law of Bi-metallic countries, while the laws of Mono-metallic countries are negatively effective by balancing each other and thus securing the par from disturbance.

That the steadiness of the par must depend on the relative amounts of the stock of Bi-metallic countries and of Mono-metallic countries—and the permanent adjustment between the latter.

That this steadiness of the par can safely be guaranteed, through Treaty, between a sufficient number of nations, for unlimited Legal-Tender, with free coinage of their own Gold and Silver Coin.

Hence, in returning to Specie Payment, it must be at any time the duty and interest of the United States, in causing a displacement of existing Specie, and inflow of it, and of a share of the annual product into her borders, to make such law and take such metal

as would not only not weaken, but would give additional guaranty to the present and future steadiness of the par.

In 1866, to have resumed Specie Payment in Gold alone would have weakened the par; to have resumed Specie Payment in Silver alone would have disturbed it still more; to have attempted to resume in Gold and Silver, at the ratio of 1 to 16, would have been ineffectual so long as France maintained the ratio of 15½; while to have resumed at the same ratio with France would have strengthened the par, and perhaps have guarded the world against the later effects of German Demonetization.

To-day Resumption presents difficulties and dangers of which thinkers had, in 1866, no conception.

The attempted demonetization of Silver by Germany (whose stock of Silver had hitherto balanced the Gold of England), was an attack upon the par of Gold and Silver throughout the world, and compelled other countries, in self-defense, to withdraw from coinage of Silver.

Hence, not only was the balance of Gold and Silver in Monometallic countries destroyed, but the fixed support of the center of gravity, the free coinage in Bi-metallic France, which has served to guaranty the stability of the business of the Nineteenth Century, has been held incapable of further maintaining the equilibrium of the two Money-metals.

Under these circumstances, what course is left open to the United States?

It must be recognized that the movement toward demonetization of Silver in Europe has in no proper sense spent its force. Motives, powerful to move nations, as well as individuals, are still active in promoting it.

It was urged in France, before the Franco-German war, that in demonetizing Silver, France would be enabled to sell its Silver to Germany; and after the war, the similar expectation was held as to the sale of German Silver to France.

The pride of leading personages in Europe is enlisted not merely in the maintenance, but also in the further extension of the Gold Standard; and it is from the demand for Silver for the United States that the relief is expected which may facilitate the spread of their great error. It is "on the cards," and is an event upon which leading men in Europe calculate, that the United States may be trusted to fail to comprehend its true interest, and hence to deal crudely with this momentous subject—in a word, that it may contribute its $130 millions of gold to the stock of Europe, and with-

draw the weight of its demand for existing stock and annual product of Gold.

It is obvious that for the United States alone to attempt to establish the Bi-metallic Standard, would result in failure to secure aught but the one depreciated metal.

The par of Silver and Gold would be left in the air. The attempt to pay the bonds in Silver would lead to an emigration of American titles of debt to the United States, and the Silver Currency would assume a character not remote from that of the present Legal-Tender Paper. In brief, instead of the Bi-metallic Standard, the result would be Mono-metallic inflation in the Dollar of the Fathers.* So far from furthering, such action might serve indefinitely to postpone that solution of the question, which we have seen to be a requirement for the interest of the United States and of the world.

Of Resumption in Silver of course the same observation holds good.

Without guaranty of a par, there is no security. Until the par is restored and secured by free coinage of Gold and Silver as Legal-Tender in a union of nations, there is no monetary peace.

Until this end is attained, mere temporizing and fluctuation, and interruption of prosperity, are the order of the day.

On the other hand, Resumption in Gold, within the time now contemplated, fulfilling what I have stated as the conditions of success, is impracticable.

What, then, is to be done?

We know that it is to the interest of the people of the United States as well as of the world that the monetary peace of the world should be restored; that its future should be guaranteed by the establishment by the civilized nations of an Universal Money; and that this can only be accomplished by the establishment of Bi-metallic Money at one and the same ratio.

We know that the logic of events and the labors of thinkers have been rapidly convincing the better minds in different nations of the necessity of Monetary Union.

It is therefore the plain duty of the Government of the United States to assist in the inauguration of this just reform, and to that end to be ready to delay action, if need be, and to descend into the

* A mode of avoiding the mechanical difficulty of obtaining Silver Coin has lately been suggested. The mints of Belgium (and why not of other countries?) are ready to coin Silver Dollars.

Nothing could be better, *unless the Silver thus coined be demonetized Silver.*

arena and meet the misguided and blindly self-seeking legislation of other nations upon its own ground, and by its competition for Gold to convince unpersuaded nations of the necessity of union. The policy of the United States, with reference to Resumption, should be molded with the purpose of attaining the proper solution of this question at the hands of Germany and of England as well as of the Latin Union, even at the cost of a delay of measures for Resumption.

There is far more to be lost by haste than by delay.*

In the guaranty of the par of Gold and Silver, by international Treaty, lies the Golden (and the Silver) opportunity for the future development of this country.

In the meantime it is not the interest of the people of the United States† that the Indian difficulties of England and the embarrassment of the German Government should be removed by a rise in the price of Silver, caused by the demand of the United States, either for a coinage of Tokens or of Dollars of the Fathers.

The solution need not demand long delay. The willingness of the United States to enter into such Treaties as we have above characterized, and to adopt the ratio‡ in which the overwhelming majority of existing coins are struck, and of existing values are expressed; and the refusal of the United States to coin Silver except with the concurrence of a sufficient body of nations, would make the consolidation of the Monetary Peace of the United States and of the world a mere question of time.

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*See Appendix L.

The Address to the King of the Netherlands, by the Society for the Progress of Industry, of July, 1876, urging the calling of an international conference, for the object of bringing about Bi-metallic Union at one ratio also distinctly declares for (page 13) the adoption of the Gold Standard in Holland and the East Indian Colonies, in case of the failure of the projected Bi-metallic Union.

†Nay, it is not even the interest of the owners of Silver Mines.

‡To adopt the ratio of 15½ instead of 15, of 1792, or 16 of 1834, is a concession; but without mutual concession union is impossible, and the monetary situation, with paper as the chief currency and but one metallic standard is most favorable to a change. To ask Europe to change would be asking Europe to re-coin ten times the amount of Gold coin now in the possession of the United States.

The cheapest mode to make the change would be to coin a new Silver Dollar at 399.9 grains fine; the best mode would be once more to coin the Dollar of the Fathers and to re-coin the existing stock of Gold in dollars containing three per cent. more Gold than the present dollar.

Compared with the benefits which the United States would derive from Monetary Union for Bi-metallic Money, the cost of re-coining the Gold dollars would not reach an appreciable fraction of one per cent.

APPENDIX.

A. The Theory of Money—A Personal Explanation—Postscript to the Second Edition.

In a postscript, which serves as preface to this Treatise (page 17), I stated that I had approached my subject "without prepossessions."

The general view of the nature of Money, however, upon which this Treatise is based is admitted to be in conflict with a certain exaggeration of *Laissez-faire* doctrine, which has hitherto been uttered, *ex cathedra*, by the economical science of the day, and, unfortunately for mankind, has been permitted to control monetary legislation. But, notwithstanding this admission, this general view of Money is treated (and on page 114 is expressly characterized) as an "obvious deduction from what every one observes."

It is proper that I should recognize and explain what may seem, in the latter, a partial contradiction of the former statement.

I say partial, because, in speaking of "prepossessions," I referred primarily to Silver *versus* Gold, the Single *versus* the Double Standard, about which contentions I had as little preconceived knowledge or interest as about the mines of Nevada.

With my view of the nature of Money and causation of its value, it was different. The general theory set forth in the foregoing pages—and it occurs to me that, in justice to myself, I may owe some expression on this point to the many expositors of views from which it is not dissimilar, the publication of whose works has preceded that of this Treatise*—had long ago taken clear shape in my mind, before I had read a page of monetary controversy.

When the late disturbance of the monetary equilibrium of the world attracted my study, and I came to review the armament of the Battle of the Standards, I could discover no doctrine that was strong to resist the all-overpowering logic of the monetary events of the last three years. They seemed to me worthy to serve as a complete "*desengano*," or undeceiver, laying bare to any seeing eye what I felt was the true view of the nature of Money, and hence the true policy of legislation.

In this, as I have since realized, I failed to recognize with what persistence it was possible that magistral and professorial economy could still seek to control monetary legislation in the spirit of past error, introducing the politician's "consistency" into science.

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* Notably to Cernuschi, De Laveleye, and Seyd, among the honored living, and chiefly to Wolowski, among the honored dead.

And yet one would think it need not be peculiarly galling to a thinker's pride to admit the new, and yet old, truth—except, perhaps, to those who have chiefly won what has been fame by their public championship of the view now known to be erroneous.

Science is a sort of coral growth, laboriously built up by the accretion of minds; and the contribution of each mind is naturally conditioned by the events which present to him practical problems for solution.

Since Adam Smith's time, the uninterrupted warfare waged in all commercial nations between Paper Money and Metallic Money has naturally emphasized the contrast of commodity and credit. Thinkers were obliged to "draw the line;" and, in so doing, they enrolled all merchandise under the same banner.

And there was no one to force these makers of theory upon which governments act to learn that child's lesson upon the two uses of shoes (see page 117), taught ages ago by Aristotle, whose works they leave silent upon their library shelves;—no one to force them to comprehend that money-merchandise was no more subject to the same laws as all merchandise than is the gold nugget identical with the gravel which surrounds it.

"Whence woes unnumbered to the Achæans came."

I can not help having faith, however, that gentlemen who have found it impossible to yield to contemporary thinkers, or to admit their powerlessness before the events of the past few years, will, in due time, find it comports with their dignity to render up their rebellious swords to Aristotle.

When that time comes—to revert to the subject of this digression—the partial contradictions between my statements, which I have above endeavored to explain, will no longer be apparent.

The foregoing treatise was, for the most part, written in the summer of 1876, and was in the hands of the printer in October. After the body of the text was in type, certain explanatory notes were added, and having been stereotyped, these necessarily remain in the same form, to the detriment of the arrangement of the work.

An edition was printed in November for private distribution. The present edition has been considerably enlarged, chiefly by the addition of the Appendix.

It occurs to me to add in this place a word of explanation concerning the citations, which will be found in the foregoing pages, of European authorities, both antique and contemporary. It has been suggested to me by friendly voices that too great prominence is given to this reference to authority. Certainly, if it has detracted from clearness, I must admit my regret, and confess that I should gladly rewrite this treatise. For the rest, I can simply say that I sought to attain two diverse objects—to state fact and principle fit to guide the conclusions of the man of busi-

ness, and at the same time to afford to the thinker in as full measure as possible material and suggestion not likely to be generally available. Of course, the latter attempt is cumulative to the former, and adds many pages which would otherwise not be needed.

To the man of business, who has time for nothing but the "bottom facts," I can, in justification of my adoption of this cumbrous method of treating my subject, cite to my defense that "bottom fact" of all, which it is the interest of every tax-payer, of every business man, of every citizen, to lay to heart—viz., that the world we live in, was, is, and will be "run" on theory. From theory there is no escape. The only choice is between theories farther from or nearer to the truth. The life, liberty, happiness, and honor of men are at the mercy of false theories. "Practice" thinks it rebels against "theory;" but "theory" might soliloquize as the Deity of the Brahmins:

"They reckon ill who leave me out
When me they fly—*I am the wings!*"

Now, the interest of the man of business, of the tax-payer, of the citizen, is that the prevailing theories should be true theories. Evidently, in distinguishing the true from the false, the history, the origin and development of theory affords invaluable insight.

POMEROY, OHIO, *January*, 1877.

B. BI-METALLISM AND THE STANDARD OF DESIDERATA.

So far as I am aware, no satisfactory solution has been suggested of the problem of applying the Standard of Desiderata in practice, on a large scale.

It seems, however, more than probable that if such solution were attained, Money-merchandise would still serve as a material Means of Payment of Purchase and of Transporting and Preserving Value; while the application of the Standard of Desiderata would consist in correcting the disorders arising from the fluctuations of the Purchasing Power of Money. It would add to the Instrument of Valuation an attachment by which fluctuations in the instrument itself are compensated.

The regulation of Money, however, would still remain a matter of prime importance, and the more secure existing Money-merchandise can be made against fluctuations in Purchasing Power, the less need of the compensating attachment, and, in any case, the less the difficulty of its application.

Hence, notwithstanding the importance of a comprehension of the Standard of Desiderata, both for theory and as an opening for future practical improvement, yet the practical questions of Gold and Silver still demand attention, as if the question of the Standard of Desiderata had not been raised.

Of course it may be admitted, without prejudice to what has been said,

that it is conceivable that such perfection may be attained in the application of the Standard of Desiderata as would deprive fluctuations of the value of Money-merchandise of any influence upon business, or, indeed, might largely do away with their use.

In such event, it is conceivable that neither the Gold Standard nor the Bi-metallic Standard would need to be, or could be said to be, consistently established.

It is, however, clear that such application is, for this generation, neither probable nor possible.

Applying, then, to the Bi-metallic Standard the test of permanence in the value of Money, for which the Standard of Desiderata gives the touch-stone, we see clearly that the elements of permanence are present in the maximum degree.

We have seen that an increase of Money is necessary, and that Money flows through the world as blood through the veins, and so a sudden increase of supply of Money-metal must be felt wherever that metal is Money, and history and the doctrine of chances are in favor of the annual product of Silver and Gold giving a steadier supply of Bi-metallic Money-metal than the annual product of either can give of Mono-metallic Money-metal.

But more than this. We see that the *status quo* was Bi-metallic; that the balance of power was held by France; and that the world is indebted to her Bi-metallic system for the par of exchange by which the fungibility of the metals was guaranteed and commerce given room for growth.

We see that if Mono-metallism be true for one, it ought to be true for all; we see also that if the legal ratio between the metals be destroyed, the whole world will either have to adopt one standard or enter upon a career of gaming contracts, which is eminently undesirable.

But the success of this Mono-metallic Revolution would be to sin against the very principle of Money and purpose of the Standard of Desiderata. Its complete success would paralyze exchanges, and would, for an indefinite number of years, raise or lower the value of what has been Money-metal, just as its partial success has done hitherto.

Hence, it is obvious not only that the Bi-metallic Standard, if adopted by a sufficient number of nations, answers the highest requirements of Money, but that there is no alternative worthy of the name.

The Mono-metallic Standard, if only consistently established in the countries that have nominally adopted it, would serve the business of mankind much as the defuelization of bituminous coal would serve their needs for heat. Anthracite and wood would rise in price, and half the heat would be gone. Mono-fuelist or mono-metallist, the logic of the position is the same—that is, of course, until the world shall have accommodated itself to the new order of things. (See page 110.) And how long would this accommodation require in a world that bristles with national debts, bonds, insurance, annuities, stock companies, etc.?

In connection with the discussions in Chapter IV, the following note from a late German work (Dr. Karl Walcker's Die Silber-entwerthungs-fruze, Strasburg, 1877) may be of interest:

"Further progress in this direction [a better regulated monetary system] is merely a question of time.

"Count Soden, Roscher, and Schäffle have rightly recommended mixed Rents, reckoned by the values of Precious Metals, Breadstuffs, and Cloths, and the writer [Dr. Walcker] has proposed that the state should make obligations expressed in these terms.

"Independently of Count Soden, who wrote about 1805, the Englishmen Lowe and Poulett Scrope, in 1822 and 1833, made similar propositions. Compare Jevons, 'Money,' etc., who, however, is in error in this, that he maintains that general commerce, in which obligations of payment are or ought to be settled without delay, could make use of such a Money. For such a purpose it would be too cumbrous. Soden's idea is applicable only to taxes, salaries, state obligations, and perhaps for purchase-money of real estate, etc. Compare Walcker's Zeitfragen, 1875, p. 153, and Dens Lehrbuch der Nat-Oekonomie, 1875, pp. 72, 73. Compare, also, Rodbertus Creditnoth des Grundbesitzes, 2 B., 1869."

I hazard the remark that Dr. Walcker is not fully aware of the originality and the scope of Lowe's invention.

C. Of Merchandise-money, Paper-money, and Credit.

In Chapter IX, I have made use of the word Credit to characterize those exchanges and compensations which are made through what are generally termed Instruments of Credit.

McLeod (Economical Philosophy I., 194) defines Credit as "anything which is of no direct use, but which is taken in exchange for something else, in the belief or confidence that we have the right to exchange it away again."

If this definition be accepted, it is plain not only that Metallic Money is Credit, as McLeod maintains, but that any investment, even the most "solid," made for the purpose of future exchange, partakes of the same nature.

The view which is suggested in this Treatise as to the totality of Laws of Legal-Tender being the efficient cause of the greater part of the value of Gold and Silver, must, in a certain degree, support this view. Under this definition, Gold and Silver are thus regarded, as Edmund Burke has said, "as representing the lasting conventional credit of mankind."

The well known utterances of Aristotle, of Baudeau the Physiocrat, of Adam Smith, and of Bastiat, treating Money as an order payable to bearer on wealth in general, point also to the truth of this generalization.

But, however important may be this recognition that the various kinds of property and modes of transfer of property are dependent for their

value and efficacy upon the confidence of some men in the future action of others, yet it must be remembered that scientific language exists for the purpose of facilitating and expressing thought, and that the gulf between a granite building and a shinplaster is too wide to be safely bridged by a popular word like "Credit," which is in daily use among men in senses remote from that above set forth.

The granite building, the gold eagle, and the shinplaster may, either of them, be taken in the belief that we have a right to exchange it away again; but the points of resemblance between them are so few, and the points of difference so many, that while in elaborating a theory to classify them under one head is proper, yet to make the classification popular by giving to the genus thus segregated a name like that of "Credit" is to invite misunderstanding.

In adopting in the foregoing Treatise the contrast of Commodity and Credit, and applying the latter term to instruments, which embody a distinct promise that a commodity shall in time be forthcoming, I have used the word credit in a sense consonant with the popular acceptation of the term, and in a far less degree liable to misconstruction.

Since this Treatise was printed, my attention has been called to a distinction set forth by M. Cernuschi, in his Mecanique de L'Echange (Paris, 1858), Chap. XXXIV.

M. Cernuschi assigns the name of genuine credit, *credit veritable*, to a loan on simple personal guaranty. So, too, a delivery of goods on commission is credit, but it is credit in merchandise.

A loan on security of any sort is, on the other hand, an exchange of capital for Money.

A bill, or check, is really an instrument for the transfer of Money.

A clear understanding of these terms would make impossible the error which so often misrepresents the growth of modern commerce as a growth of "Credit" *per se*, and which hence obscures the fact that the substantial improvement is really in the mode of economizing the bodily transfer of merchandise, including Money, largely by facilitating the convenient transfer of the ownership of such merchandise.

A further distinction between Paper-Money and Notes, Bills, and Checks, is, that while the former serves actually as Money (elevated, one might say, by law to the dignity of being itself a commodity), the latter are rather modes of economizing the use of Money.

Hence, M. Cernuschi has suggested and used in his works the term "economical payments," as a substitute for what are usually called credits, credit exchanges, etc. The expression "transfers of title to Money" might also be serviceable.

D. THE FALL OF SILVER VS. THE RISE OF GOLD—PRICE AND PURCHASING POWER OF DEMONETIZED METAL AND OF LEGAL-TENDER.

The discussion of the "Depreciation" of Silver has given rise to a curious contrariety of inference.

Here Silver is condemned, as if it were already ruined, beyond hope of redemption; there it is maintained that it is Gold that has risen, and not Silver that has fallen. Both statements harbor fallacies, and fallacies that tend to obstruct the safe solution of the questions at issue.

The latter doctrine, sometimes based upon the "Minute of the Indian Government," has, of course, its truth for India—applied to Europe, the share of truth is reduced to a minute fraction.

To what extent Gold has risen, is a most important question; but an increase of Purchasing Power of freely Coinable Legal-Tender Gold is incommensurate with the fact that certain quantities of non-Legal-Tender Metal brought a Gold Price lower than they brought when the latter was Legal-Tender at a statutory par with Gold.

So, the fall of Silver is often misunderstood. As has been shown, the real "Fall" of Silver is the fall of existing Bullion and much Coin from being freely Coinable into Legal-Tender to not being Coinable at all.

Free Coinage, at a fixed ratio, is the regulator of the fluctuations of Money Metals. The regulator has been removed. In Europe and America Gold is the only freely Coinable Money-Metal.

The story can not be told in a few words. The single expression, Fall or Depreciation, does not tell the whole story. It is only by keeping clearly in view the nature of Price, the phenomenon of Local Prices, the variety of Laws as to Money-Metal in different countries, that one can guard against misunderstanding.

The following may serve as an illustration: Reasoning about human events, with a view to action, may be said to take the form: "*a* and *b* occurred; if *a* and *b* had not occurred, or if *m* or *n* had occurred, then *x* or *y* would have been the result." This is true from framing a Constitution to driving a nail, and, of course, is essential to reasoning about Price. *A* says, "The Price of Silver in London gives the price for the world. Silver has fallen 20 per cent. below 15½ in London; *ergo*, the 1,000 millions dollars of Silver Coin in Europe and America are "depreciated" 20 per cent.

Here are two isolated facts. Silver is sold in London at 20 per cent. below par. 1,000 millions Dollars of Silver Coin exist in the Western Hemisphere, and are not sold in London at any price, nor anywhere else, that is for Gold. The object of *A's* observation is to gain a correct view of the status of the 1,000 million Dollars. *A* deduces *x* and *y* from *m* and *n*. What means *A* when he says Silver is "depreciated?" Let him take his place in the "if" and "then" categories. Let him deduce *x* and *y* from *m* or *n*. *A* answers (*m*), "If you want to sell your Silver for Gold in London or (*n*) elsewhere, you will (*x* and *y*) find you will get the

London price for it—20 per cent. below par." To which I observe, That depends on how much is sold. What will the London Price be if Silver becomes Legal-Tender in London? What will be the London Price if 1,000 millions Dollars of Western Silver be offered for sale at once? What will be the London Price if the Indian Government asks for bids for 1,000 millions Dollars of Indian Silver? It would be bought by the ton. We should have Silver roofs instead of tin roofs; and the cans, pans, and pails would be of Silver. But if it were Legal-Tender in London it would be permanently at par.

It may be said, but the same ifs and thens assert themselves about all prices, and yet people are safe in drawing deductions from the "market price."

Not at all; "prices" and "market price" relate to the exchangeable value of merchandise expressed in terms of Money.

The price of Silver is the value of one Money-Merchandise in another, and, as we know, Money-Merchandise exists chiefly not for uses peculiar to it, but for a use common to all commodities, namely, to be exchanged; and the stock on hand of Silver and Gold exists, and its value is built up chiefly because of the Laws of Legal-Tender.

To tell of the price of one in the other is another way of saying the Nations have been passing laws that, under actions of existing self-interest, Silver exchanges for 20 per cent. less than what once was par.

It would be more descriptive of the state of affairs to say the Abandonment of Silver instead of Depreciation of Silver; for the former expression would suggest the two salient points of the situation—both cause and effect.

In considering the Purchasing Power of Silver we discover another problem. Depreciation of Silver, Rise in Gold, are both at fault here.

If the averages of price have fallen 10 per cent. on the continent within the past two years, then the Purchasing Power of one thousand millions of Silver has gained one hundred millions in spite of the Fall and Depreciation.

A rise of the Purchasing Power of Money on the continent is a rise of the Purchasing Power of five-franc pieces and thalers as well as of Napoleons and Crowns.

True the thalers and five-franc pieces are really in the situation of Tokens; for a percentage of this value they are like Greenbacks. But suppose the averages of price had fallen 10 per cent., and the Gold price of Silver in London is 10 per cent. below the *status quo ante*, can it be then said that there has been no change of the Purchasing Power of Silver, but merely a rise in the Purchasing Power of Gold?

Of course it can not be stated as a *fact*, for the thalers and écus are legal tender, and the holder of them does not return to the seller 10 per cent. of all the goods he has purchased. It must then be stated in the categories of "if" and "then."

And how would it be stated?

If the reader will attempt to state his conditions and consequences, he will at once see the impossibility of exhausting the subject by the few words which would be applicable to simple merchandise compared with a "Standard of Value." A Demonetized Metal held for sale—a currency consisting largely of metal which has ceased to be freely coinable—a Money-metal, the total demand for which is all at once largely increased—two metals, one of which is Money here, and the other Money there, and between which the statutory international and national par has just been destroyed—all these are important elements of a chaotic situation, in which the Standard of Desiderata is the only safe foundation in theory and the check of the development of exchanges the salient fact.

The thing that is made to be used is compared with that which is made to be exchanged—the thing that is perishable with that which is indestructible—the thing of which there is a small stock on hand with that of which the total stock is sufficient if it be only used for Money, but if it be ousted from the position of Money is in excess, and has no claim for its former value.

E. VALORIMETRE, EVALUATEUR, AND INSTRUMENT OF VALUATION. (See note, p. 43, and pp. 64, 65, 66.)

I desire to suggest to the thoughtful reader a comparison of the expressions Instrument of Valuation and *valorimètre* and *évaluateur*.

To measure length, weight, or space, is, in simple phrase, to find how many times a certain length, weight, or portion of space, assumed as a measure, is contained in the thing measured.

The magnitudes are cognizable through the senses, and the process is a comparison of one magnitude with another magnitude.

For securing substantial identity in the material used as a measure of length, weight, and space, existing arrangements suffice.

So long as the physical identity of the thing measured is preserved, the result of measurement will be substantially the same for all persons, times, and places.

Neither of these distinctive features of simple measurement is found in the ascertainment of value.

Here the measure and the thing measured are disparate. Weight, length, space, offer no suggestion; the magnitudes become commensurable only by their exchangeability for other magnitudes.

Hence, of course, the measurement of value is really a calculation of the possibilities of future exchange—a resultant of nice inferences and intuitions (if one may use so dangerous a word) as to the possible or probable acts of men.

One might say, indeed, that, as compared with ordinary measurement, the ascertainment of the value of a thing is distinctively a mental process. The numerical calculation how many times the thing measured contains the measure is merely the last stage of the process.

Again, the physical identity of measure and the thing measured may be preserved, and yet the ascertainment of the value of a commodity will produce a different result with different persons, or at different places and times.

Such being the case, the expression Measure of Value is, strictly speaking, inapplicable to Money; while the expression Standard of Value is likewise open to misconstruction, seeing that though, in referring to the material of which Money is made as being that to which all values are usually referred, the phrase "Standard of Value" is applicable; yet, inasmuch as this reference to Money-merchandise presupposes the segregation of some definite portion of that Money-merchandise as a unit of measurement, the idea of measuring, in the ordinary sense, is inevitably suggested.

Impressed with this view, I cast about for a name of this Function of Money in "measuring value," which would exclude those fallacies which have housed themselves in the words Standard and Measure, and clearly indicate the peculiar nature of the process of comparison of which I have been speaking.

After much consideration, it seemed to me that the expression "Instrument of Valuation" would be, within certain limits, a sufficient substitute for both Standard of Value and Measure of Value; that "Instrument" would cut off the fallacies of metrology which infect "Measure" and endanger the usefulness of "Standard;" while, by using "Valuation" in the place of "Value," the idea of a process is substituted for that of a condition; the transitive verb—the verb of action, to value—by its attendant noun, supplants the idea, Value, as a thing at rest, permanent, and completed.

The general term "Instrument of Valuation" would not, of course, exclude characterizing Money-merchandise as the "Standard of Valuation;" while a definite weight of such Money-merchandise, established, perhaps, as the Unit of Coinage, might be described as the Standard Unit of Valuation of a particular country.

Whether "Instrument of Valuation" is really worthy of the place I have assigned to it, is a question for others.

The words *évaluateur*, suggested by Wolowski, and *valorimètre*, suggested by Garnier, have the advantage of being simple, single words.

The obvious criticisms may be made against these, however, that "valuator" suggests automatic action, while "valorimeter" suggests a Measure of Value with improved adjustment, and hence would rather point to the outcome of the Tabular Standard of Value, which I have called the Standard of Desiderata, than to metallic Money.

To the thoughtful reader, no apology is needed for this digression.

The fallacies that lurk in words are the quicksands of theory; and as the conduct of nations is built on theory, the correction of word-fallacies is the never ending labor of Science.

Fortunate if the words can themselves be abandoned!

Conceive to what extent legislation has been affected by the treacherous engagingness of the word "Protection." Voters and legislators are instinctively in favor of protection—that is of the weak against the strong, but not *vice versa*.

Again, the party, in this country, one of whose great aims was, at one time, the perpetuation of slavery, owed much of its popular vote to the name Democracy. What could the foreign-born voter find in "Whiggery" to excite an equal enthusiasm.

Had the world fully recognized Money as an "Instrument of Valuation," rather than as a "Measure of Value," the panic of 1873 might never have reached its portentous height, and certainly the depression of 1874, 1875, 1876 (and 1877?) would never, to such a grievous degree, have troubled the progress of the world.

F. Fungibility, Freedom of Trade, and Demonetization.

The following citations and remarks will serve as a commentary and elucidation of the remarks made in the text upon the above subject:

The first is from Julius Paulus, who, with Ulpian Papinian and Gaius, is one of the chief pillars of Roman Law.

"A loan of the kind, called '*mutuum*,' says Paulus (Dig. xii, 1, 1), must be of those things that (*consistunt*) are allied in their nature to weight, number, or measure. By giving these, we are enabled to make a loan, because it is returnable in commodities of the same general character (*quia in genere suo functionem recipiunt per solutionem magis quam in specie*); for, in other things, we can not make a loan (*ire in creditum*, give credit), because, in such case, a loan of one commodity can not be paid with another commodity without the consent of the creditor."

Where the credit is given in things which "consist" in number, weight, or measure, the consent of the creditor is not necessary: the debtor repays the loan in commodities of the same genus, and evidently at his option. In things of this kind, the Law permits the borrower who receives *a* to make restitution by returning to the lender, *x*, or *y*, or *z*.

Here, then, is a public guaranty to the debtor that the Law will enforce the fungibility of things which "consist" in number, weight, or measure.

A consideration of the subject will apprize the reader that debit and credit in articles of this kind is one of the conditions precedent to progress in civilization; that fungibility is in a manner the sunlight which makes possible the growth of commerce.

Now, Gold and Silver are materials of this sort, and it is plain that numerata pecunia, nummus, numisma (Lawful Money), whose admitted fungibility had, as Aristotle had recognized, made it an instrument of such credit that it was necessary that he who had it should be able to get what he wanted, was, in practice, the chief material of this contract of

which Paulus is speaking, as well as of the greater number of others of which the Pandects treat.

Now, both as bullion and as Coin, the law recognized the mutual fungibility of these metals.

But how was this possible? In what weight, or number, or measure, do these two individual metals "consist," that the Law could recognize them as fungible?

If A borrow good wheat, he fulfills his obligation by returning this or that good wheat, as he pleases. So if he borrow a pound of Gold, he pays his debt by returning this or that pound of Gold, as he pleases. So if he borrow a pound of Silver, he may take this Silver or that Silver with which to pay his debt, and the Law will protect him against the vexatious creditor who demands the identical Silver which he lent.

But what says the Law, if he seek to return Silver, having borrowed Gold?

Can he borrow a pound of Gold, and cancel his debt by returning a pound of Silver?

What says the Law? I repeat.

The creditor has nothing to say: if the metals are mutually fungible, the selection of the material in which to pay is with the debtor. How does he exercise his option? By what bridge does he cross the abyss which nature has placed between two of the primordial elements? Where is the common ground of weight, or number, or measure, between the two? Is it equality in their attributes?

Could he cancel his debt of a pound of Gold by returning a pound of Silver? Are ten pieces of Silver a return for ten pieces of Gold? or is a cubic inch of Silver dust an equivalent of a cubic inch of Gold? Plainly one of them is the best; this is all that "nature" can suggest.

What says the Law?

By its laws of coinage and its recognition of price in either metal, it creates an equation foreign to nature, artificial and arbitrary, distinct from that ordinarily associated with barter, exchange, or price.

And from this Legal Ratio comes the mutual fungibility of the two Metals, by which the domain of exchanges is indefinitely enlarged; by which much Credit is made possible, which otherwise could not have existed; by which Commerce and Civilization are extended.

Now, it might be said that Justinian's Code made the mutual fungibility of Gold and Silver in a manner a statute of the Empire, and that therefore later it became a statute of the Holy Roman Empire of the German Nation, and it is a part of the foundation of Saxon and Latin civilization.

Again, in his De Jure Belli et Pacis (Lib. II. 12, § 17, Pecunia quomodo functionem recipiat, edition of the two Cocceii), Grotius says (the translations are my own)

"As to Money, it must be recognized that naturally Money is fungible,* not in its mere material, nor in its special appellation or form, but in a far wider sense—namely, in the sense that it can be compared with other things; either all things, or at least those things for which there is greatest need.

His editor, Gronovius, observes of that untranslatable expression, *functionem recipere*, that it means "to suffer that one thing shall be given for another, or another thing for the first, or the first for something else" (*alia pro alia, et aliud pro ea, et ipsa pro alio*). As to "*Materia*," he notes, "as Gold for Silver, and *vice versa*;" of "*appellatione aut forma*," as "Denarii for sestercii, philips for thalers, if only the sum be delivered in some sort of good money."

Of *magis communi*, he notes "in the broadest sense of all exchangeable or vendible things, in so far as it is made equal to them, and is either expended or received for them."

Cocceii notes that Gold and Silver are not, *per se*, fungible, nor is the form or name of Coin fungible, "but the quantity or valuation (*æstimatio*), which by public faith and authority is conferred upon Coin."

Upon *genere magis communi* he observes: "More rightly, Money derives its fungibility from the fact that the value (*quantitas æstimationis*) is defined by public authority, and therefore is always certain."

Hence, he says, "Aristotle calls Money a guaranty (*sponsòr*), because he who has it has all things that he needs,—can, indeed, compare all things with this Money as a measure."

He further remarks of Gold and Silver: . . . "It is clear that this metal (he seems, in the spirit of Bi-metallism, to refer to the two together as one) can provide such a measure of things as is discoverable in this world, and one that will suffice for the uses of human life, at least if abuse be avoided and proper care be devoted to this thing (*publice*) by the state, and that beyond all other material this metal is most convenient for this purpose."

It is, by the way, suggestive that Cocceii, the distinguished Jurist just quoted, was Privy Councillor of the King of Prussia.

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* Naturaliter functionem recipere. I can think of no better translation. An old translation (by "several hands," London, 1725) renders the passage thus: "Now as for Money, we must observe that it naturally derives its Currency or Equivalence not from the matter only," etc. The Paragraph is entitled: How Money goes for everything else.

Whewell gives it as follows:

"Concerning Money, it is to be noted that it naturally operates functionally—that is, one portion of it may do the office of another; and this, not only as to the material [Gold for Silver, and reciprocally], nor in its special appellation and form [crowns for dollars], but in a more general sense."

The German translation gives "to be represented" as the rendering of *functionem recipere*, while the French reads "la monnaie est d'une nature fonctionnaire."

So, likewise, Graumann, the Director of the Mint, quoted on page 13, from whose work I add the following citation as germane to the subject:

"Money was regarded by the Romans as sacred, and was coined in their Temples at the cost of the State.

"And such is still the fact with those nations that understand their interest and the nature of Commerce and of Money, and withal regard the rules of Equity as a duty.

"Money is a part of the general law of nations (des allgemeinen Völkerrechts), and it is therefore necessary that a Prince, in establishing their true value put [the Money of his State] into a correct relation to the Coins of other States, if his subjects are to deal with them without loss.

"Alterations of Money have at all times carried great disorder in States, and have been most injurious to the common weal."

What would Paulus or Grotius have said of demonetization of Silver? Evidently, unless there be a miraculous substitution of Gold for Silver, the demonetization of Silver must be an annihilation, *pro tanto*, of fungibility. The effect of such a measure upon Freedom of Exchange is a subject that will repay meditation. It must, of course, be understood that there is a radical distinction between "par" and "price." The par is an equation between different kinds of Legal Tender; price is the equation of merchandise with Legal Tender, expressed in terms of the latter.

Two distinct effects of demonetization present themselves at once. 1. By ceasing to be Legal Tender—among the civilized nations, for example—it is substantially banished from local exchanges in those countries. 2. By the destruction of the par, the security of business, and hence the sum of exchanges, is diminished.

On comparing the results of such action with the constant increase of exchanges under a perfected institution of Bi-metallic Money, it will become apparent that it is legitimate to speak of demonetization as an offense against the "Law of Nature and of Nations."

It may serve for further illustration to note objections that may not unnaturally occur to the reader.

The distinction between Money-merchandise and merchandise in general, and the influence of law upon the former, is not affected by the fact that Money may exist independently of law. It is not probable that Aristotle or Paulus or Grotius were ignorant of the fact familiar to the reader, that savages use some sort of Money. A savage or a child may, in his speaking, use all the figures of rhetoric; and yet the poetic art—literary criticism—is identified with civilization. So, too, there were just men before Menu, and Moses, and Solon; and yet the world still has need of jurists and moralists.

Again, it does not touch the argument to say that the metals owe their position as Money to their intrinsic qualities. These are conditions which the free-will of man may make ineffective. Witness the Legal Tender

Acts and the German "Münz-reform." So the Gold and Silver which were, it is said, Money in Egypt sixteen centuries before the Christian era, at the rate of 1 to 13½, had the qualities which fitted either or both to serve as security for Bank of England Notes, thirty-six centuries later. For all that, no one thinks of denying the efficacy of the Bank Charter Acts.

Again, it is of no avail to object that law is the creator of law books, of cannon, of speakers' desks, and Congressional reports; or, again, that law is a condition of civilization, and, without law, there would be no steam-engines, machinery, telegraphs, etc.

Compared with this or that commodity, or with all commodities, Money is infinite; for it is the measure of all property, and instrument of all exchanges, and the figures of the exchanges which it makes possible exceed, in a limited period, the totality of existing values.

The Instrument of Valuation, the Means of Payment, of Purchase, of Transporting, and Preserving Value, is to existing property what the atmosphere is to the earth's surface.

Hence the danger of poisoning the atmosphere of business. Imagine the air partly deoxygenized! The world would be disturbed, without knowing exactly why.

Now, Demonetization of Silver leads not merely to a destruction of the exchangeability of certain limited amounts of Silver no longer Legal Tender, with all other commodities, but, by destroying the Legal Par of existing money, and thus removing certainty as to its future value, disturbs production and consumption, and exchanges of existing property.

It is a partial deoxygenation of the atmosphere of business.

Bi-metallists desire the restoration of the oxygen in permanence.

In the meantime, some gentlemen assisting at the diagnosis are inquiring what is the normal price of Silver, independent of Bi-metallic Legislation. in other words, they wonder if deoxygenation, produced by the Legislation of monogaseists, will not cure itself.

The normal price of Money-merchandise!

What is the "normal price" of birds-of-paradise expressed in codfish? or *vice versa?*

Gentlemen are misled by the associations of the Silver Market. They have become partially deoxygenated in the atmosphere of Demonetization.

And yet they would have no patience with one who should drag the Serpentine for Sea-serpents!

A more profitable inquiry would be, What is the "normal" course to be pursued by the civilized world in reference to the Silver Question?

G. ARISTOTLE, LOCKE, AND NEWTON ON MONEY. (See pp. 87, 101, 102, 106, and 85.)

I have stated, on page 106, how I was led to search the scripture of the Father of Science to discover some utterance of his on the nature of Money—and the quotation from his Ethics, which is placed upon the title-page, indicates that the views upon this subject, which I had set forth in this Treatise, can safely rest upon his authority.

Some time after what I had deemed my discovery had been in print, on having the good fortune to meet M. Cernuschi in New York, I learned that the testimony of Aristotle had earlier attracted his attention, and that in his work "Michel Chevalier et le Bimetallisme" (a reprint of articles printed in "Le Siécle" in April and May, 1876), a full chapter had been devoted to this subject.

In this work, too, I learn that a passage in the Politics, even more clear and strong than that in the Ethics, had escaped my notice.

I have the further gratification of learning, from a chapter which he devotes to Locke and Newton, that the distinguished author finds, in the passage from Locke, of which a sentence stands on the title-page of this Treatise, the refutation of the views of M. Chevalier,* and of the theory which has hitherto made itself heard in lecture-rooms and felt through Monetary Legislation.

From the utterances of Sir Isaac Newton also (the rare reprint of whose work I had not seen), M. Cernuschi lucidly sets forth the effort of that great man to establish, through Legislation in England, a relation between Legal Tender Gold and Silver which should be as nearly as possible a mean between those obtaining in the rest of Europe.

Newton simply aimed at accomplishing in part what the advocate of Bi-metallism is intent upon realizing in full to-day.

The author further brings out in clear light Sir Robert Peel's admission of the necessity of the use of both metals as Money in providing that a certain proportion of Bank of England Notes may be issued on deposit of Silver.

I can not resist the temptation of introducing to the reader the following passage from M. Cernuschi's work, before quoted, which reconciles completely the apparent anomaly of Locke's having been a monometallist (Silver):

"If Locke were living, we should say to him," says M. Cernuschi, "you committed the gross error* of making it clearly understood that the value of Money resides in law. In the 17th century the nations had not yet thought of making treaties to obtain for themselves an uniformity of charges for postage or for telegraphic messages. You did not suppose that they could come to an understanding to establish uniformity in the relative value of the precious metals, and thus render that relation invariable.

* See Chapter VIII of this Treatise, p. 101, 102.

"But to-day this international agreement is practicable, and its efficacy is beyond question. Since 1803, oscillations have occurred, because the legal ratios of the different nations have not been the same. When they are made the same, oscillations in the relation of the two metals will be no longer possible. Is it right that we should desire that this international agreement may take place?

"Locke would gently nod his venerable head. The economists die, but the philosophers surrender."

H. Extremes of Opinion concerning the Influence of Law upon the Value of Commodities used as Money—The Laissez-faire Theory and Iwan Possoschkow. (See Chapter VIII.)

To show the extremes of opinion upon the causation of the value of commodities used as Money, I ask the reader to compare the following quotations:

In his paper on the Silver Question, read before the American Social Science Association, at Saratoga, September 6, 1876, Mr. Horace White says (p. 9), speaking of the inundation of Gold from California and Australia: "We are brought irresistibly to the conclusion that a demand does exist for Gold which is not equally a demand for Silver, and that such demand exists independently of Legislation. For there was no disturbing Legislation of any magnitude or consequence during the period when this immense outflow and absorption of Gold took place."

(p. 16.) "There is a surplus of Silver in the world, represented by a recent decline in its price from 60d to 53½d."

(p. 23.) "Possibly measures might be devised for still further economizing the use of Gold, but I can not see how Legislation, either national or international, can essentially enlarge the demand for either, any more than for copper, iron, or cotton.

"This would be no less a task than causing men to desire more of a thing than they do desire."

(p. 24.) Of the "increasing demand for Gold," Mr. White says: "It is believed to be the principal cause of the decline in the price of Silver, and it can not be materially counteracted by Legislation; certainly not by legislation on the part of the United States."

The reader will, I trust, readily survey from above the field of error which these quotations present.

In commenting, as I shall, upon this error, with what may seem harshness, I desire to say that I do this with no disrespect to Mr. White, but on account of a strong sense of the practical dangers to which this error leads.

I trust that what I may say will not seem inconsistent with the belief that we may be, in antique phrase, *in venatione veritatis amici*—comrades in the chase of truth.

Legislation, Mr. White thinks, is powerless to affect the demand for Silver or its value. And this Mr. White says in full view of the late "Depreciation of Silver," a fall of 20 per cent in its price, which most thinkers admit to have been caused by Legislation (namely, Laws for demonetization and limitation of coinage), and which, as all thinkers would admit, could have been prevented by Legislation (for example, a law making Silver Legal Tender in England at the ratio of 1 to 15½).

Again, Mr. White accounts for the inflow of Gold and outflow of Silver in the period 1850–1870 as a result of demand, "independent of Legislation." No "disturbing legislation," he says.

But what does Mr. White mean by "Legislation?" Is there no "Legislation" in the fact that from 1850 to 1870 it was "the law" in France that her great population could pay its myriad obligations either in Gold or Silver, at a fixed ratio, as it chose?

Is it possible that Mr. White does not know that it was this "Legislation" which prevented that depreciation of Gold which was feared by so many? (See works cited on page 194.)

And yet one need not be surprised at the contradiction. Chevalier himself, who advocated Silver when Gold was increasing, and advocates Gold when Germany adopts it, is at the same time the author of the "parachute" explanation of the action of the Double Standard in France. In his instance, however, the metrological doctrine of Money as a Measure, which Chevalier believes to be founded on Aristotle, conspires with the tone with which his distinguished compeer, De Parieu, in the passage cited (page 146), treats Legislation—the embodied will of the race.

If we ask what can account for the unconsciousness with which gentlemen pass by these salient points of the subject, we shall—at least such is my conclusion—need only to apply the old analogy of faith and superstition to the economic "dispensation" of Free-trade.

The excesses of the superstition which has encrusted itself about the truths of Free-trade have, as is well known, aroused a rationalistic reaction in many departments of economy, distinguishable, of course, from its ancient antagonist, "Protection."

The let-alone doctrine is usually applied, of course, as a practical guide to legislation, and it is in this form that it has chiefly excited attack.

Sometimes, however, it serves as a glass through which the thinker takes his observations of facts, and such appears to me to be the case with the excellent author of the Essay on the Silver Question.

The reader of the foregoing treatise will be aware that the views expressed in it form a protest against the distorted view of the Monetary Question which is attained through this unscientific mode of observation.

Of the peculiar position assumed by the devotees of Free Trade, one might forcibly say, adopting a figure appropriate in this age, that they appear as financial mediums, who have succeeded in "materializing" the phantom of Free Trade in Legal Tender.

As for Free Trade in copper, iron, and cotton, with which Silver is compared, we may admit the fact (apart from the question of desirability), but how can we bridge the gulf between Silver as a commodity, pure and simple, and Silver as Legal Tender?

Now, Silver was in America, is still in many countries, and may be in others Legal Tender, and the making it or not making it Legal Tender is the gist of "the Silver Question."

The human race is all agog with the question, whether the Law shall give or shall take away the privilege of being Legal-Tender.

If men do not desire a commodity more when it is Legal Tender than they do when it is not Legal Tender, it is evident either that the privilege of being Legal Tender, a measure of liberation from obligations, is "worth" nothing, or that all commodities have it alike. But it is evident that as human nature is constituted, if it be really a privilege, it must be "worth something," and so the admission of asserted inability of Legislation to affect the value of "Money-merchandise" leads us to the conclusion that there must be a general "Let-alone-ness" about Money, which may properly be characterized as Free Trade.

Now, Free Trade in Legal Tender may have existed in the primitive days of unsophisticated barter, and certainly must flourish in Utopia; but when we ask how it can be materialized, as the devotees of Free Trade think, (if they are consistent), it is materialized—to-day—we find ourselves in confusion.

Can payees demand, or can payors give in payment, whatever merchandise they prefer?

Is any influence exerted by the laws of a country, directly or indirectly, in pursuance of which business contracts are expressed and are fulfilled—as, for example, in India, with Silver; in England, with Gold; in France, with either, at the debtor's option, and in the United States with Greenbacks?

In what merchandise do men express their taxes and appropriations, salaries and fees of officers, fines, penalties, damages, costs of suits, official appraisals, and sales?

Is it a matter of indifference or a matter of choice with payor or payee whether all these obligations are fulfilled with saw-logs, whale's blubber, raw hides, or loads of gravel? Do men take up a bill of exchange with freestone, or pay for postage stamps with dynamite?

Now, all these questions occur naturally, and must be answered affirmatively, if we admit that Free-trade in Legal Tender is present in the flesh.

Indeed, there are still more difficult questions. For example, do Governments enact laws that he who has contracted to deliver meats, textile fabrics, or glassware, may fulfill his contract in metals, oils, and breadstuffs, at schedule rates?

The reader must not be surprised at the question!

For Germany did something directly analogous. Her "Coinage Re-

form," when completed, means simply that he who contracted to deliver the merchandise, Silver, must fulfill his contract by delivering the merchandise, Gold, at schedule rates.

Evidently, the thinker who materializes ideal Free-trade in Money, in the nineteenth century, in the interests of Science, must, likewise, be prepared to be done by as he does; and when he asks for a fish, be satisfied to receive a stone; and when he asks for bread, to receive a serpent.

We turn now to the other extreme of opinion on this subject. A cardinal proposition of the Theory of Money is that Money is a commodity. The corollary to this proposition, set forth in Chapter VIII, is that the chief use of such a commodity being as "Lawful Money and Legal Tender," Legislation (of course not of one country, but of the world) by affecting the demand for the commodity, exerts a prepotent influence upon its value.

As we have seen, the position of Mr. White conflicts with the corollary. The following doctrine, by substituting a different corollary, undermines the main proposition.

The doctrine is taken from the writings of Iwan Possoschkow, a Russian reformer of the days of Peter the Great.

"The foreigners," he says, "estimate their foreign Money according to the quantity of the Metal it contains, and not according to the power of the Monarch who issues it. They have a rate of relative value for Silver and Copper. But we honor our Monarch as God, and we hold his dignity in honor, and most zealously obey his will. On whatever thing we see the name of his Imperial Majesty, that thing we estimate highly. . . . In coining Money, men must not do as the foreigners do, and consider the amount of Copper, but consider only the will of his Imperial Majesty. We are no foreigners; it is not the Copper that is valuable to us; it is the name of our Czar. We do not look at the weight of the Money, but upon the inscription." . . .

He objects to the foreigners that they "come into our country, test the value of our money, and then raise the price of all their goods."

"Such prices," he says, "are the fruit of their insolence. Without any good reason, they have raised the price of all their wares, and have grossly offended us by so doing. Their self-will is responsible for it.

"To be sure, they give as a reason for the rise of prices our Money, about which they have nothing to do.

"If our Coins come into their country, they might, for all I care, let our Kopeks count only for half a Kopek: that is their affair: it is their country, and their will.

"But among us they have no power: with us, Our Monarch has all power.

"Among the foreigners, kings have less power than the people: there the kings can not accomplish anything out of their own sovereignty: but their subjects are all-powerful, and especially the merchants."

(I take these extracts from Brückner's interesting work on Copper-Money Crises. St. Petersburg, 1867.)

As a pendant to the utterances of the distinguished Russian, one might quote largely from the speeches, made in the same spirit, of the Hon. William Allen, late Democratic Governor of Ohio, and candidate for nomination as President.

Indeed, Possoschkow might serve as a sort of spiritual ancestor for the entire school of Inflationists.

This doctrine applies the magnifying glass to Locke's expression, "imaginary," with which Chevalier (see p. 95) finds fault; and, ignoring all else, clings to this unsubstantial image as the sole proposition of the theory of Money.

The will of a single Legislature is therefore supposed to be potent to control the imaginations of men, and so, in order to make an equivalent of silver roubles or dollars, it is only necessary for the Government to say "this is a rouble," or "this is a dollar."

It is noteworthy, however, that, with Possoschkow, the original tradition of a commodity has not been lost. His currency is like the subsidiary coinage, so extolled from the days of Lord Liverpool to those of Dr. Lindermann, except that it is not limited. Instead of being only a part, the entire currency is Token currency.

This fact recalls, *sic magnis componere parva*, the famous orange-peel wine of Dickens' "Marchioness." The reader will remember that it was "very nice wine, if you made believe" sufficiently.

It is illustrative of the progress of the age that Possoschkow, although requiring that one should "make believe a good deal," yet gave a real commodity as a starting-point! The roubles were made of good Copper!

In other words, there was honest orange-peel to flavor the water, and give some support to the imagination.

The Inflationist, on the other hand, demands the perfect miracle from the fiat of the Legislature of a single nation. He has abandoned the orange-peel, his imagination rests content with water, and asks no extraneous flavoring. He needs no commodity, he will have a piece of paper merely, of no value whatever, except as to record the "will of the Czar."

It appears, to sum up the whole matter in a few words, that the devotee of Free Trade confounds Money with other merchandise; while Possoschkow and Allen are not only unable to distinguish between merchandise and credit, but do not see the difference between good credit and bad credit.

The latter error is, of course, more dangerous, in one sense, than that of Mr White.

The Legal Tender Acts of this country, in 1862 and 1863, were in the spirit of Possoschkow; while Mr. White's views would lead Germany to persist in her pernicious but now half-abandoned attempt to substitute Gold for Silver.

The Act of Legislation first-mentioned provided, under the existing self-interest of men ("Gresham's Law"), that through the use of a certain form of credit become Money, the business transactions of the country

should enter an abnormal condition; while the Money metal of the country went to Europe to quicken wholesome activity there, and rectify the balances with Asia for Indian cotton, etc.

The latter Act of Legislation provided, under the working of existing passions and interests of men, that the efficiency of the Money of the world should be effectively reduced; that the blood should be coagulated here and there in every vein which commerce traces through the body of the world.

General prostration is the result.

The world and men wonder whether convalescence will ever come.

To those who are earnestly discussing the remedy for such legislative playing with edged tools, to have it proclaimed—and in the name of Science—that Legislation is powerless, creates a painful impression.

It is unfortunate that errors like these should be committed in the name of so beneficent an idea as that of Freedom of Trade.

The time will come, however, when Freedom of Trade will be rescued from this misunderstanding.

The regulation of the world's Money in such a way as to attain the maximum of fungibility will be recognized as another illustration of Liberty under Law, and the right of the individual will correspond with the duty of society, to enjoy and maintain universal freedom of coinage and universal Legal-Tender of Silver and Gold as one Bi-metallic Money.

And then the world will see Freedom of Trade* such as it has never yet seen.

I. A LATE UTTERANCE OF PROFESSOR SOETBEER, AND QUERIES SUGGESTED BY IT.

In the Wiener *Freie Presse* for October 10 and 11, 1876, appeared a review, by Dr. Soetbeer, of a work, "Currency and Commerce" (Währung und Handel), then newly published by Dr. Hertzka, editor of that well-known journal.

The letters deserve attention, both from what they say and from what they do not say.

The reader of the foregoing Treatise is apprised of the position which Dr. Soetbeer holds among distinguished thinkers who have lived to see their ideas carried into action.

As I have said (page 20) Dr. Soetbeer's "exertions for the reformation of German currency, begun thirty years ago, were crowned with success in the unification of German coinage."

The "success" of Gold monometallism is another matter.

The letters are chiefly occupied with discussion of the views upon the

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* I use the expression "Freedom of Trade" in its general sense, apart from the suggestion of "absence of Protective or Prohibitive Tariff," or "non-interference of Government with commerce."

evils of paper currency under which Austria has long suffered, and upon which the author and his reviewer are entirely in accord.

As to other matters, the following extracts may be of interest:

"Our German literature of political economy offers thus far but few publications from which the thoughtful reader can obtain really valuable instruction on these subjects; for, as to well-known general views and assertions which one sees in the text-books and in most newspapers, when they expatiate on Paper-money and Questions of the Standards, there is no progress to be made by such means; one remains as wise as he was before. . . .

"The views of the advocates of the Double Standard, and especially of Cernuschi, are, at least in one respect, not without justification.

"If all commercial states, without exception, in law and in practice adopt and maintain the Bi-metallic Standard at one ratio (say 1 to 15½), for their entire coinage, with unconditional freedom of coinage of both metals, it can not be denied that in such case, for the present, and probably for a long period to come, a permanent and stable relation between Gold and Silver would be secured; that, in a word, temporary aberrations of one or the other metals from this ratio would hardly reach the limit of ½ to 1 per cent.

"The admission is, however, not one of any real importance, for the supposition upon which alone the project rests, that it would be possible to bring the various states to such an agreement, is a complete illusion.

"And how could the necessary guaranty be obtained, that each state, under all varying circumstances, would most loyally hold fast to such an agreement?

"How can one seriously suppose that England and Germany could, in the interest of the Double Standard, give their consent to abandon their well-founded Gold coinage system in favor of a precarious international Monetary Union.

"The foremost motive for the defenders of the Double Standard is the fear that after universal demonetization of silver, the stock of Gold, as sole money-basis for the needs of commerce of the civilized nations, will be far too small, and will unavoidably bring about a pernicious increase of the value of money.

"He who is firmly convinced of the correctness of this view is only acting consistently when he agitates for the maintenance and the introduction of the Double Standard; but the view itself is incorrect, and the facts are directly to the contrary.

"In consequence of the extraordinary increase of the circulating medium, through the increased production of Gold and issue of Paper money, the purchasing power of money has lost appreciably, and by disturbance of incomes, as well as other effects, has, in many instances, changed the economical situation for one the worse (durch Verschiebung der Einkommenverhältnisse, sowie sonstige Wirkungen viele berechtigte wirthschaftliche Verhältnisse beeinträchtigt).

"Now, the demonetization of Silver will offer a means of working against the progressive depreciation of Money, and from this standpoint alone the resistance to the Double Standard appears to us important and well-timed.

"But, although on impartial examination some of the arguments for the Double Standard do not show themselves to be so contradictory (verkehrt) and absurd as they are represented (by Dr. Hertzka), still the views and considerations which speak in favor of the single Gold Standard, and which this work has set forth in clear and convincing style, are sufficient to oppose any new introduction of the Double Standard."

Dr. Soetbeer then proceeds to analyze with praise a chapter of Dr. Hertzka's, which points out the advantages of the Gold Standard and the disadvantages with which an isolated nation would labor on adopting the Silver Single Standard.

"It would not be as bad as an irredeemable paper money, but it would be very nearly as bad.

"The choice of Austria is only between continuance of the present Paper Currency till further events, or replacing it by the Gold Standard."

Dr. Soetbeer and Dr. Hertzka agree that the price of Silver is doomed to unlimited fluctuation, as the nations proceed to get rid of their demonetized Silver, and discuss the effect upon the Silver Market of an attempt to sell Silver on the part of the States of the Latin Union.

I ask the reader's attention to the following questions, which Dr. Soetbeer's remarks suggest:

The English system is a "well-founded system." When was it well founded? Was it in the period 1816–25?

Was it well-founded in the great crises which, from time to time, have swept over England?

The Queen of England is Empress of India—the Indian system is an English system. Is it well-founded now?

"Again, the German system is well-founded." Dr. Bamberger, who champions the cause of Dr. Soetbeer, in Berlin, as Dr. Hertzka does at Vienna, did not seem to regard it as well-founded in 1875.

Has the situation altered materially since then?

What is the present Money of Germany? Gold marks and Silver thalers.

And, if Germany joined the Bi-metallic Union with England, the metals would fluctuate, on extreme occasions, perhaps ½ or 1 per cent.

Would not the prosperity of the majority of Germans by furthered by this Bi-metallic Union?

Would it not be the interest of Germany to join this Union?

Again, how is the necessary guaranty obtained that, under varying circumstances, nations will hold fast to any treaty whatsoever?

Will not the fact that the union proposed will unite so large a body of nations give exceptional sanction to a treaty for Bi-metallic Money with Free Coinage?

Is it not true that such a treaty is so entirely a dictate of common sense and public spirit (Gemein-sinn) combined—that it is so obviously for the common good of all concerned—that it is no more "precarious" than a Postal Convention?

Is it any more difficult for one who examines the subject with full knowledge and with impartiality "seriously to suppose that England and Germany may join such a union," than it was to suppose that England could abolish the Corn Laws, or Germany could do away with serfdom or with the oppressions of the law of domicile of tradesmen?

Again, these occasions, when, in spite of the Bi-metallic Union of the leading nations, the relation of the metals would fluctuate 1 per cent., of what sort would they be, and how often would they probably occur?

Dr. Soetbeer is positive that there is no danger of a fall of Prices from the adoption of the Gold Standard.

Does he admit that any fall of Prices has taken place?

Can he tell where the Northern nations of Europe are to obtain Gold to take the place of the Silver they try in vain to sell?

Can he tell where the United States is to obtain Gold with which to resume Specie Payments?

Whence is the Gold to come with which Austria is to free herself from this curse of irredeemable paper, which Dr. Soetbeer and Dr. Hertzka so feelingly deplore?

Dr. Soetbeer thinks Silver will go down utterly if the Latin Union undertake to sell.

Can he tell where the Latin Union is to obtain Gold in its place?

Meantime, what becomes of India?

Again, can Dr. Soetbeer reconcile his views with his own admissions?

The value of Money, he says, has fallen through the issues of Paper Money, as well as through the increased production of Gold.

Paper Money is a great evil.

Does he expect a miraculous flood of Gold, which will not only take the place of the Paper Money that has been issued, but will take the place of all the Silver which Europe is to demonetize?

Whence is this Gold to come?

If it fail to come, what will Austria, Italy, Russia, the United States do?

Is he, as a German professor, prepared to doom these nations to continue under the curse of Paper Money, and this in the interests of science?

Again, when did this fall in the value of Money occur? Did it occur chiefly between 1850 and 1860, or has the value of Money fallen of late years?

To what *status quo* do these incomes, these "*berechtigte wirthshaftliche*

Verhältnisse" (untranslatable) require that the general value of money should be brought back? Is it the *status quo* of 1860 or 1850? Who are the recipients of these incomes, who are the possessors of these just claims for increased wealth?

What proportion do they bear to the population of Germany; and how did they acquire this indefeasible title, which science is bound to respect, to the impoverishment of millions of their contemporaries?

I say impoverishment, and I appeal to science if any appreciable rise in the value of Money, caused by scarcity—and this Dr. Soetbeer must necessarily, at least, contemplate—does not mean impoverishment.

How do the rights of the owners of these incomes, which Dr. Soetbeer vindicates, compare with the vested rights of their fellow-Germans?

How can such rise fail to be what he himself calls pernicious (höchst schädlich), and thus, on his own reasoning, justify the advocacy of Bimetallism?

Dr. Soetbeer must, I think, admit that these questions suggest themselves naturally upon a perusal of his review of "Währung und Handel."

He will also not think it strange if events have suggested that in Germany those who understand the situation fully may be constrained by a form of patriotism to say:

"The die is cast—Germany can not go backward."

"If we make a bold front Germany will prevail, and the weakest will go to the wall. Germany will emerge from the transition period in time, and 'after us the Deluge.'"

But will not Germany be "going back" if she enforce this policy?

Will she not be going back from her position in science, in prosperity, in good government?

If Dr. Soetbeer will give full and sufficient answer to these questions he will confer a lasting benefit upon his fellow-men.

J.—Senator Jones on an International Standard Convention.

From the speech of Senator Jones, of Nevada, in the Senate of the United States, April 24, 1876 (Jones' Resumption and the Double Standard, Washington, 1876, p. 152): [See note, p. 134.]

"It would be desirable for all nations to adopt permanently the same standard of value, and if the same were, as in my opinion it no doubt would be, the Double Standard, to adopt the same relation between the metals. To effect this object, all that is necessary is an International Standard Convention, which can be called by any one of the Great Powers, and should be called by the United States. Provision should be made that no other projects but the standard and ratio should be determined upon, and that the nations should vote according to population or wealth, or on a mixed basis consisting of both. For such an International Convention, to be called by the United States, there is imminent necessity.

I regard this project as likely to lead to results of the highest importance. It may become the forerunner of that federation of the nations of which poets have dreamed and bards have sung. The initial point of such a federation is most fitly the Standard of Value, for this lies at the base of all social and governmental arrangements; it determines the institution of property."

K. The Present State of Debate. (See notes, p. 17 and 134.)

My remoteness from centers of discussion will, I trust, serve as an excuse for any incompleteness of the following notice of the discussion of the question of Single and Double Standard by the American Association for the Advancement of Science. (I am not certain that I have given the title correctly.) No full printed report has yet come to my hand, and I am unable to add anything to the obvious criticism suggested in a note to page 143, upon the resolution of the Association reported in the papers at the time in favor of the Single and against the Double Standard. The argument from metrology appears to have controlled the conclusions of the distinguished gentlemen who supported these resolutions.

The Discussion of the Silver Question before the Social Science Association took place at Saratoga, September 6, 1876.

The chairman of the meeting, Mr. George Walker, whose established reputation as a thinker in matters of finance gave weight to his opinion, gave a turn to the debate which should have put the advocates of Gold-monometallism, if such there were, upon their mettle, and have called forth all the arguments they could bring out upon the subject.

In an interesting paper, he outlined the condition of public discussion in Europe, and showed the strength of the Bi-metallic movement, closing with an earnest tribute to the life and works of Wolowski.

Mr. Walker also read a letter from Mr. Goschen, Chairman of the Silver Committee of the House of Commons, revealing the desire that the United States should do something for Silver.

Mr. Horace White followed with an essay "on the Silver Question."

The essay may, I think, be simply divided into an examination of the fact that Silver is "depreciated;" the contention that the Double Standard is impracticable; that Legislation can do nothing for the value of Silver; that the United States should bide her time. I had an opportunity of expressing my assent to the latter practical suggestion in the debate which succeeded the essays; but to his other positions, as the reader of the foregoing pages will be aware, I had, before hearing Mr. White, matured views directly contrary, to which latter I was also enabled to give brief expression.

There was, withal, a radical deficiency in Mr. White's paper, which seemed to infect the argument that followed it, and made the whole occasion an unsatisfactory one for a scientific body.

If it be true that it is difficult to make a survey without any fixed

starting-point, it is equally true that it is impossible to discuss intelligently a question of Applied Political Economy without agreeing on the *status quo* to which the teachings of science are to be applied.

Now the corners and base-line for American discussion of the Silver question are given in the return to specie payment; and for the sake of the argument, if there was to be an argument, it was incumbent to agree whether that event was to be looked forward to, and if so, when?

Mr. White seems, however, to have preferred discussing the Silver question without laying down this base-line, and the debate followed unsteady courses, rather than the initiative wisely suggested by Mr. Walker, although it perhaps gained in interest what it lost in point.

Beside the general expressions of interest in the subject, and of approval of Mr. White's paper, in which quite a number of distinguished members joined, there were excursions into the questions of the Greenback versus the National Bank Note, of the desirability of the Secretary of the Treasury having a seat in Congress, allusions to the dangers of "Bonanza" Legislation, and an interesting account by Mr. Edward Atkinson of the new legal-tender case, whose success would wipe the greenbacks out of existence.

Herr von Studnitz gave some interesting considerations as to the state of the demand for and of the manufacture of Silver plate, as promising to arrest the decline in Silver, but did not, if I remember rightly, discuss the subject in other directions.

The argument for the Double Legal Tender was presented with force and learning by Mr. Thomas Balch, of Philadelphia.

A statement made by Mr. Balch, with reference to the important role played by Silver, even under the shadow of demonetization, in the payment of the French War Fine, was taken up somewhat hotly by Professor Sumner, of Yale College, who seemed unable to recognize its correctness.

Mr. Balch gave Wolowski, Leon Say, Soetbeer, and Bamberger as his authorities.

Another interesting point made by Mr. Balch was that to his knowledge, he having been living in Europe at the time, the expectation was, before 1873, held by European capitalists that they would succeed in committing the United States to the Single Gold Standard, and that it was fair to observe that the Coinage Law was the result of their efforts, and passed in their interest, and not in the interest of the country.

Mr. Horace White attacked Mr. Balch's position on this subject, and adduced the premium on Silver in 1873 as conclusive evidence that no such motive could have influenced Legislation in Washington.

I had occasion to reply to Mr. White on this point, that long before 1873 it was a favorite argument on the Continent for the Gold Standard, that Silver was about to decline in value.

The activity of Mr. Balch in promoting the Restoration of Specie Pay

ment on the Bi-metallic basis, has a pleasant suggestion of prosperous augury.

Mr. Balch is the gentleman who, before the fall of Richmond, exposed himself to hostile criticism by urging at first in a communication to the New York *Tribune*, dated from Paris, that the difficulties of the United States with England, arising from the fitting out of rebel privateers in England, should be submitted to arbitration, and that not of a Monarch, but of a Court of impartial Jurists.

It was from this seed that the Geneva Court of Arbitration upon the "Alabama Claims" was finally developed.

Not long after the meeting of the Social Science Association, one of its prominent members, Mr. B. F. Nourse, of Boston, (see note, p. 68,) was appointed a member of the Monetary Commission, but was unfortunately compelled to decline the position.

His views upon the subject, upon which the Monetary Commission have to report, have, however, been obtained through his testimony before the Commission, and his influence is recorded on the side of the international establishment of the Bi-metallic Standard.

The cause of sound Money in the United States has received an important reinforcement in the arrival in this country (in December, 1876) of M. Henri Cernuschi. To the majority of those who read these lines the position of this distinguished thinker is well known. M. Cernuschi visits this country for the purpose of answering in person the questions addressed to him by the Monetary Commission of Congress. His ripe experience in financial matters and known authority as an economist, seconded by the originality and unique brilliancy of his style, give encouraging augury of success to his philanthropic devotion to the cause of the Monetary Pacification of the World.*

The following extract from one of "Three Letters on the Silver Question," by Samuel Smith, Esq., President of the Chamber of Commerce of

*M. Cernuschi is a native of Lombardy (a Doctor of Laws of the University of Pavia), and his career and character give evidence of the generous qualities of a compatriot of Garibaldi. His participation in the revolutionary movements of 1848 led him, after scenes of action and hardship, to leave Italy and establish his home in Paris. He became in time the head of the Banque de Paris, and remained in this position until his voluntary retirement from business some years ago. Among his works are: Reponse a M. de Cavour, Unite et Federation, 1861; Mecanique de l'Echange, 1865; Illusions des Societes Coöperatives, 1866; Contre le Billet de Banque, 1866; L'Or et Argent, 1874; Le Monnaie Bi-metallique, 1876; Michel Chevalier et le Bimetallisme, 1876. To which must be added the philippics in which he has assailed the prevailing errors of the day upon the Monetary Question. (See page 194.)

Liverpool, will most effectively illustrate the change that is taking place in European opinion:

"Mr. Picton ably and clearly expresses the view of the older English economists, and the arguments he uses are such as at one time satisfied me that our present monometallic system was the best. How I have been led to see that the dual system, as expounded by M. Cernuschi and other French writers, is the best, if generally adopted, I will try to explain in the briefest manner."

The following paper* (indexed under the title of Appendix L) on the Silver Bill, presented to Congress by Mr. Bland, of Missouri, in June, 1876, and passed, with the amendments of Mr. Kelley, of Pennsylvania, in December, will further serve to suggest the attitude of the Silver Question in January, 1877.

It was prepared to serve as a protest against the threatened inconsiderate action of the government, and was kindly given to the public by the *Bankers' Magazine*, and was sent to members of Congress.

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*I may, in this connection, not inappropriately insert the following table, taken from a Mint Report in the National Calendar, of Washington, 1836. Can there be any connection between the short-sighted legislation of 1834 (see pages 150 and 185), which added six per cent. to the value of Gold compared with Silver, and the increase in the production of the Gold Mines of the Southern States revealed in this table?

Amount of Gold received annually from the Gold Region of the United States from 1824 *to* 1835 *inclusive.*

Yrs.	Virginia.	N. Carolina.	S. Carolina.	Georgia.	Tennessee.	Alabama.	Not ascertain'd	Total.
1824	.....	$5,000	.....	.....	.....	.....	.....	$5,000
1825	.....	17,000	.....	.....	.....	.....	.....	17,000
1826	.....	20,000	.....	.....	.....	.....	.....	20,000
1827	.....	21,000	.....	.....	.....	.....	.....	21,000
1828	.....	46,000	.....	.....	.....	.....	.....	46,000
1829	$2,500	134,000	$3,500	.....	.....	.....	.....	140,000
1830	24,000	204,000	26,000	$212,000	.....	.....	.....	466,000
1831	26,000	294,000	22,000	176,000	$1,000	$1,000	.....	520,000
1832	34,000	458,000	45,000	140,000	1,000	.....	.....	678,000
1833	104,000	475,000	66,300	216,000	7,000	.....	.....	868,000
1834	62,000	380,000	33,000	415,000	3,000	.....	.....	898,000
1835	60,400	263,500	42,400	319,900	100	.....	12,200	698,500
	312,900	2,317,500	242,900	1,478,900	12,100	1,000	12,200	4,377,500

THE SILVER BILL IN CONGRESS.

[The following appeared as an article in *The Banker's Magazine and Statistical Register* (of New York) for January, 1877.
The text of the Silver Bill, of which it is a criticism, and which passed the House of Representatives on December 11th, 1876, is given on page —.]

The Bland Bill means mischief!

The Bill proposes that the old silver dollar shall be coined as legal tender side by side with the gold dollar. In effect, it therefore restores the monetary system, which obtained before 1873, with its ratio of one to sixteen. Payments are to be made in dollars, of which the silver weighs sixteen times as much as the gold dollar. Silver becomes legal coin, and laws ordering payments in gold alone become an anomaly, inviting speedy repeal.

This bill is really an attack upon the Bi-metallic System, the restoration of which is needed for the future prosperity of the world; and if it becomes law it will prove an obstruction to the prosperity of the United States.

Our situation with reference to the two metals is well known. There are few silver dollars in existence, and there is but little silver bullion in the country. Of gold, we have some 130 million dollars worth, coined and uncoined.

The reader is, doubtless, well aware of the late vicissitudes of the price of silver brought on chiefly by demonetization in Germany. Silver has fallen, and has risen and fallen again, driven hither and thither like a rudderless ship in a storm. Germany, alarmed at the depreciation of the metal she had to sell, has calmed the panic by withdrawing for awhile from the market; while the United States, unconscious of its truest interest, has powerfully sustained the price of silver in London by its demand for coinage of tokens.

Turning to Europe, we observe that there the coinage of legal tender silver is at an end. Germany's demonetization has put the world into a state of siege on that subject. The Latin Union has been compelled to abandon the half-measure of partial limitation of coinage, which she adopted in self-defence against Germany, and has stopped the mintage of silver entirely. So Holland is in a state of dead-lock, awaiting the convocation of an International Conference.

The causes of the stoppage of silver coinage are not, in any proper sense, temporary. So long as the policy of demonetization prevails in a country which has silver to sell, other countries must abstain from maintaining free coinage of silver as legal tender, or consent to part with their gold in return for the silver thrown upon the market by their neighbor state.

Free coinage of a metal as legal tender, is a standing statutory bid for all of that metal that there may be for sale at the price. But if a nation loses all its gold, while gold remains an international money, and receives in its place silver, which is no longer an international money (being demonetized), no proper par is maintainable between it and other countries. The country that takes the silver becomes a sort of India to the serious detriment of international commerce.

But if a sufficient number of nations coin silver at one fixed equation with gold, silver would remain an international money; the par would be secured in permanence, and there would be no danger of the latter event above suggested. This was abundantly illustrated in the case of Holland, whose demonetization of a circulating metal (gold) in 1849 was made possible by the working of the Bi-metallic System in France and other countries.

All is different to day. The northern countries of Europe are demonetizing silver; the product is increasing, and no great combination of nations exists to neutralize so violent a disturbance of the equilibrium of the metals.

Hence it is plain that the action of the Latin Union in refusing to coin legal tender silver, is in the present phase of the question, *final*. It is an adjournment, *sine die*. There can be no further action until the entire situation is changed.

Another vital fact as to the possible action of the Latin Union is also clear. The legal ratio is there 1 to 15½. The silver franc weighs 15½ gold francs. *The Latin Union can not coin silver at any other ratio.* It is a *sine qua non* for the asumption of coinage of legal tender silver in the Latin Union, that the situation should be such as to make it a wise course for her to coin *at that ratio* and at no other.

The causes of this necessity are apparent. France possesses a stock of about a thousand millions of dollars, about half gold and half silver. For the last sixty years business has been done in coin (for paper being at par has not altered this fact). To change the ratio of gold and silver, would compel France to melt down and recoin 2½ milliards of francs, either of gold or of silver.

The same observation holds good of the remainder of the continent. It is worth remarking, also, that the entire gold-mark and silver-thaler stock of Germany stands (in nearly equal amount) at this same ratio of 1 to 15½, so that the hope of inducing Germany to abandon demonetization is bound up in this maintenance of the 1 to 15½.

It is evident that if silver is to be coined again as legal tender in Europe, it must be at the ratio of 1 to 15½.

Now in this struggle against demonetization, the franc is the natural ally of the dollar. The English sovereign

declared war on silver in 1816, and the German mark has entered the field of conquest with fatal force. The franc has been compelled to withdraw within the fortifications of coinage, and for the present, legal tender silver is unknown in European mints.

What shall the dollar do? Shall it come to the help of the silver franc, and restore silver to its rightful position, or shall it reinforce the mark and the sovereign, and prevent silver from becoming an international money in Europe?

Now to coin silver dollars at 1 to 16, is to take the latter course. Coinage at 1 to 16 in the United States, while it may for a time raise the price of silver in London, and so serve the prejudices of Germany and England, yet deprives silver of its chief supporter in Europe. Coinage at 1 to 16 drives the Latin Union out of the field.

For there is a difference of about three per cent. between the equations 1 to 15½ and 1 to 16. Water flows readily at an inclination of three feet to the 100, and silver will move as readily at the call of three per cent.

If the Latin Union coins at 1 to 15½, while the United States coins at 1 to 16, the irresistible gravitation of self-interest will carry all available silver with steady flow to the mints of France. Not a single silver dollar would be coined in the United States.

A similar experience was made long ago. From 1834 to 1873 the market-price of silver in London was controlled by the French ratio of 1 to 15½, and the ratio of 1 to 16, which the monetary legislation of 1834 had attempted to make effective, failed to bring to pass the coinage of Silver dollars in the United States. Had the statesmen of Jackson's administration, in abandoning 1 to 15 in 1834, adopted the 15½ instead of 16, the silver dollar might have been coined side by side with the gold dollar down to the present time. Here was Benton's mistake! Had not this mistake been made, the proverbial palmy days of Hard Money Democracy would have deserved the name.

It is sufficiently obvious that the Leaders of the Latin Union are cognizant of these facts, and they are men who are not likely to stultify themselves. The Latin Union can not coin the silver franc if we coin the silver dollar at one to sixteen. She can not become at once the sole receptacle of all the silver demonetized in Germany, and of the new silver from American mines.

Hence we say, if the United States coins silver at 1 to 16, it will be without supporters in the Western World — and will alone assume the Asiatic role. What will be its situation in such event? How will it bear the shock of this silver inflation?

Of course England and Germany (bondholders excepted) will hail with pleasure the acceptance by the United States

of the rejections of Europe. Our hundred and thirty millions of gold are a glittering prize for Germany, and, while the annual product of the gold mines diminishes, Gold-monometallists will be glad to see the United States unconsciously binding itself not to employ gold at home, and precluding itself from sending silver to Europe.

But in the meantime what will be the condition of the monetary par between America and Europe? Our silver legal tender, like our paper legal tender, will not have the character of money in Europe. In Asia, of course, it will be money and this is an advantage. But how will our dealings with Europe be regulated? Can there be anything in the nature of a steady "par" between the two systems of money? Will the gold market in New York, under the new regime, take the place of the silver market of London, in chronicling the fluctuations of silver the American money? Will silver be more steady in value than paper has been—or will the Whiteback be coupled in popular imagination with the Grayback and the Greenback which it replaces?

How will our balances, our interest, be paid to Europe? We cannot pay in silver for it is not money in Europe. If we pay in gold we must buy the gold and Europe will determine what quantity of silver we must give in exchange for it.

I leave the answers of these questions to the thoughts of men of business, and will simply sum up the result in a word.

If the United States are alone in coining silver we lose our gold; we are flooded with a legal tender which is not a legal tender in Europe, the chief country with which we deal; we weight ourselves with coin which has ceased to be an international money, and we have destroyed the par between our money and that of Europe. And we are a debtor nation!

In view of these considerations I think I am justified in saying that the Bland Silver Bill means mischief.

A word as to restoration of silver at 1 to 15½.

It is obviously the wise policy of the United States to make easy the way of resumption of specie payments, and assure a speedy return of prosperity. To do this it is necessary to have free coinage of silver and gold at full-weight as unlimited legal tender. But as we have seen, we can not do this alone, and if we coin at 1 to 16 we are inevitably alone in restoring silver.

The occasion is one for diplomacy. The time demands a success greater even than that of the Treaty of Washington. If the spirit of Alexander Hamilton, could direct our diplomacy an International Conference might induce England and Germany to join the United States and the Latin Union in free coinage of gold and silver at the equa-

tion of 1 to 15½. This would be the inauguration, if not of universal, at least of comparative monetary peace throughout the world. There are many signs that the fulness of time for this has come. It has long been evident that the labors of Wolowski were not in vain—and opinion is breaking down before the crusade which Cernuschi has organized in Europe.

Austria is hoping for a Conference, and the President of the Chamber of Commerce of Liverpool, is writing philippics in favor of bi-metallic money. The presses of Carlsruhe have just put forth a work, (Die Silberentwerthungs frage—Dr. Karl Walcker—1877) which proves that the German coinage reform was a mistake; that the spirit of the time demands bi-metallic money, and that an International Monetary Union is not only necessary but practicable.

But failing to obtain the support of Germany and England, the other parties to this need of restoration of silver may join by treaty, and secure a settlement second only in excellence to that just suggested.

That this solution is entirely within our reach, there can be no doubt. In the meantime a practical question may be suggested, as an appropriate subject of public discussion.

In adopting the ratio of 1 to 15½ shall we leave the gold dollar as it is, and coin a new silver dollar weighing 399.9 grains, 3 per cent. less than the "Dollar of the Fathers," or shall we recoin the Dollar of the Fathers,—make the existing gold dollar legal tender at 97 cents, until we can recoin the existing stock of gold into new dollars containing 3 per cent. more gold than the present coin? There is but one other alternative: to make a complete break with the past and mint coins of different weight from either the gold dollar of the sons, or the silver dollar of the fathers.

In the debate on the Silver Question at the meeting of the Social Science Association, at Saratoga, in September last, I had occasion to make a brief presentation of the views which are above set forth in full (as applied to the criticism of the silver bill).

For the fuller development of these views however, and for security in discussing the probable action of European countries, it is to me a pleasure to be able to express my indebtedness to the conversation, criticism and suggestions of the distinguished author of the word "Bi-metallism," and most devoted living promoter of the Monetary Peace of the world.

In extending to America that impassioned activity which has already borne such fruit in Europe, M. Cernuschi has laid the cause of sound finance in this country under obligations, of which posterity will owe its share. S. D. H.

APPENDIX.

A PARTIAL LIST OF WORKS TREATING OF THE QUESTIONS DISCUSSED IN THIS ESSAY.

Selected from Appendix A of Dr. Soetbeer's Denkschrift betreffend Deutsche Münzeinigung.

1838—1848.

J. G. HOFFMANN. Die Lehre vom Gelde als Anleitung zu gründlichen Urtheilen über das Geldwesen. Mit besonderer Beziehung auf den Preussischen Staat vorgetragen. Berlin 1838.

A. VON HUMBOLDT. Ueber die Schwankungen der Goldproduction, mit Rücksicht auf staatswirth-schaftliche Probleme. (Deutsche Vierteljahrs-Schr. IV, S. 1—40, Stuttg. 1838.)

F. NEBENIUS. Ueber die Schwankungen des circulirenden Mediums in Europa und deren Einfluss auf die Geldpreise der Dinge in den letzten fünf Decennien. (D. V. Schr. XII, 1—72.) Stuttg. 1841.

J. HELFERICH. Von den periodischen Schwankungen im Werthe der edlen Metalle, von der Entdeckung Amerika's bis zum Jahre 1830. Eine historischökonomische Monographie. Nürnberg 1843.

A. SOETBEER. Denkschrift über Hamburg's Münzverhältnisse. Hamburg 1846.

W. NÖRDLINGER. Vorschläge zu einem allgemeinen deutschen Münz-Maass- und Gewichtsystem. Mai 1848.

ST. CLAIR DUPORT. De la production des metaux précieux au Mexique etc. Paris 1843.

L. FAUCHER. Recherches sur l'or et l'argent, considerés comme étalon de la valeur. Mémoire lu à l'Académie des sciences morales. Paris 1843.

M. CHEVALIER. Des mines d'argent et d'or du Nouveau Monde. (Revue des deux mondes. Nouv. Sér XVI, 980—1035, Paris 1846.)

W. WARD. Remarks on the monetary legislation of Great Britain. London 1857.

1849—1860.

A. SOETBEER. Andeutungen in Bezug auf die vermehrte Goldproduktion und ihren Einfluss. Hamburg 1852.

— — Beiträge und Materialien zur Beurtheilung von Geld-und Bankfragen mit besonderer Rücksicht auf Hamburg. Hamburg 1855.

— — Die Wichtigkeit der Silberwährung für Deutschland. Frankf. a. M. 1853.

— — Denkschrift, betreffend die Einführung der Goldwährung in Deutschland, mit besonderer Rücksicht auf die hamburger Bankvaluta. Aus-

gearbeitet in Auftrage der Commerz-Deputation in Hamburg (von A. Soetbeer). Hamburg 1856.

S. Oppenheim. Die Natur des Geldes. Mainz 1855. Die Deutsche Münzeinigung. (D. V. Schr. LXXIII. Stuttg. 1856.)

A. v. Baumgartner. Die edlen Metalle und ihre natürliche Rangordnung als Geldstoffe. Wien 1857.

F. Keller. Die Gold- und Silberfrage. Ein Versuch. St. Gallen 1860.

A. Vrolik. Le système monétaire du Royaume des Pays Bas, la refonte des vieilles monnaies d'argent et de la démonétisation de l'or. Utrecht 1853.

M. Chevalier. De la baisse probable de l'or, des conséquences, commerciales et sociales qu'elle peut avoir et des mesures qu'elle provoque. Paris 1859.

— — On the probable fall in the value of gold etc. Translated from the French, with preface by R. Cobden. Manchester 1859.

L. Faucher. De la production et de la démonétisation de l'or.—La démonétisation en Hollande et la production en Russie, en Amérique et dans l'Australie. (Rev. d. d. m. Août. 1852.)

A. P. Frichot. Etudes monétaires au point de vue de l'adoption par tous les peuples de l'uniformité de poids, de mesures et de monnaies. Paris 1855.

C. Tarassenko-Otreschkoff. De l'or et l'argent, leur origine, quantité extraite etc. etc. T. I. Paris 1856.

E. de Parieu. La question monétaire. (Revue contemporaine, Octobre 1858.)

E. de Laveleye. La question de l'or en Belgique. Bruxelles 1860.

J. T. Danson. Of the quantity of gold and silver supposed to have passed from America to Europe, from the discovery of the former country to the present time. (Journ. of the Stat. Soc. of London. XIV, 11—44, 1851.)

J. Ward. A history of gold as a commodity and as a measure of value. Its fluctuations both in ancient and modern times, with an estimate of the probable supplies from California and Australia. Lond. 1852.

F. Scheer. Observations on the effect of the Californian and Australian gold; and on the impossibility of continuing the present standard, in the event of gold becoming seriously depreciated. Lond. 1852.

P. F. Stirling. The Australian and Californian gold discoveries and their probable consequences etc. Lond. 1853.

W. Austin. On the imminent depreciation of gold and how to avoid loss. Lond. 1853.

W. Newmarch. The new supplies of gold; facts, and statements, relative to their actual amount, and their present and probable effects. Lond. 1853.

1861—1866.

(H. Weibezahn.) Die deutsche Münzfrage. Versuch einer Lösung derselben in einheitlicher Richtung, unter Anbahnung des Uebergangs zur Goldwährung. Rinteln 1861.

A. Soetbeer. Zusammenstellung der Erklärungen von 35 deutschen Handelskammern in Betreff der Goldausmünzung in Deutschland. Herausgegeben von dem bleibenden Ausschusse des deutschen Handelstags im März 1865. Berlin 1865.

— — Antrag in Bezug auf Herstellung einer allgemeinen deutschen Münzeinheit, seitens der Vor-Commission des ersten deutschen Handelstags (Ad. Soetbeer Berichterstatter.) Heidelb 1891.

— — Verhandlungen d. vierten deutsch. Handelstags über die Frage der Herstellung deutsch. Münzeinheit u. Annahme d. Goldwährung, Berlin am 20 u. 21 Oct. 1868. Berichterstatter Ad. Soetbeer. (Aus dem stenograph. Berichte.)

H. Landrin. Traité de l'or. Monographie: histoire naturelle, exploration statistique etc. Paris 1863.

Bordet. L'or et l'argent en 1864. Paris 1864.

C. Roswag. Les métaux précieux considerés au point de vue économique. Paris 1865.

M. Chevalier. Cours d'économie politique etc. III. vol. 2. éd. refondue et considérablement augmentée. La monnaie. Paris 1866.

W. S. Jevons. A serious fall in the value of gold ascertained, and its local effects set forth. With two diagrams. London 1863.

W. Nassau Lees. The drain of silver to the East, and the currency of India. London 1864.

W. R. Mansfield. On the introduction of a gold currency into India. London 1864.

F. Hendriks. Decimal coinage; a plan for its immediate extension in England, in connection with the international coinage of France and other countries. London 1866.

1867—1869 (April).

A. Lammers. Deutschlands Aufgabe in der Münzfrage. Bremen 1868.

G. Hartmann. Ueber den rechtlichen Begriff des Geldes u. d. Inhalt v. Geldschulden. Braunsch. 1868.

H. Contzen. Ueber die Geschichte des Geldes und über Goldwährung. Leipzig 1868.

— — Der Uebergang zur Goldwährung. Eine Sammlung von Preisschriften, herausgegeben v. d. bleibenden Ausschuss des deutsch. Handel. stages. Berlin 1868. Einleitung V.—XV.

H. Grote. Der Uebergang v. der Silberwährung zu der Goldwährung. S. 1—76.

G. Millauer. Die Einführung der Goldwährung in Deutschland. S. 77—127.

H. Weibezahn. Zur deutschen Münzreform. S. 128—161.

R. Bach. Die nothwendigen Vorbereitungen für den Uebergang z. Goldwährung. S. 163—216.

J. G. Killermann. Beantwortung der Preisfrage.

G. D. Augspurg. Zur deutschen Münzfrage Bremen 1868.

— — Zur deutschen Münzfrage. II.—Nachträge. Bremen 1868

— — Zur deutschen Münzfrage. III. Bremen 1869.

F. Xeller (Bergrath und Münzwardein in Stuttgart). Die Frage der Internationalen Münzeinigung u. der Reform des deutschen Münzwesens, mit besonderer Rücksicht auf Süddeutschland. Stuttgart 1869.

P. J. Bachiene. De internationale Mont-Conferentie in 1867, Gravenhage, September 1868. (Overgedrukt uit de Economist 1868.)

Engelenburg. Proeven van wetont werpen ter invoering van het frankenstelsel etc. Nimwegen 1868.

Ministère des finances —Rapport de la commission chargée d'étudier la question de l'Etalon monétaire. Paris, 1867.

Conférence monétaire internationale. Procès verbaux. Paris, 1867.

Ministère des finances. Documents relatifs à la question monétaire. Paris, 1868. 4°.

— — Rapport de la Commission chargée d'étudier la question de l'étalon monétaire. Paris, Mars 1869.

Vasques Queipo. La cuadruple Convencion monetaria considerada en su origen, objeto etc. Madrid 1867.

T. Mannequin. Uniformité monetaire. Rapport au comité syndical des républiques de l'Amérique centrale et méridionale. Paris 1867.

S. Ruggles. Report to the Department of State. Washington, 1867.

Memorandum. Metrical system of international coinage. (Washington, Treasury Department, April, 1869).

J. Ross Brown. Report on the mineral resources of the States and Territories west of the Rocky Mountains. Communicated to Congress, March 5, 1868. Washington 1868, pp. 674.

J. W. Taylor. Report to the Treasury Department on the mineral resources of the United States, east of the Rocky Mountains, May 2, 1868. Washington 1868.

Report of the international conference on weight, measures, and coins, held in Paris June, 1867; communicated to Lord Stanley by Professor Leone Levi, and Report of the master of the mint and Mr. Rivers Wilson on the international monetary conference held in Paris June, 1867. London, March, 1868. (Parl pap.)

Report from the Royal Commission on international coinage, together with the minutes of evidence and appendix. Presented to both houses of Parliament by command of Her Majesty. London 1868. (Parl. pap.)

W. Stanley Jevons. On the condition of the metallic currency of the United Kingdom, with reference to the question of internationale coinage. London, November, 1868. (Journ. of the Statistical Society of London. Vol. XXXI, part. IV.)

E. Seyd. Bullion and foreign exchanges theoretically and practically considered; followed by a defence of the double valuation, with special reference to the proposed system of universal coinage. London, 1868.

— — Die Münz Währungs, und Bank-fragen in Deutschland. Elberfeldt 1871.

— — The Fall of the Price of Silver. London 1876.

W. Bagehot. A practical plan for assimulating the English and American

money, as a step towards a universal money. Reprinted from the Economist, with additions and a preface. London, 1869.

East India Currency. Copy of the report of the Commission appointed by the Government of India to consider the question of the currency. 16. March, 1868. (Parl. pap.)

J. T. Smith. Remarks on a gold currency for India, and proposal of measures for the introduction of the British sovereign; also, a suggestion regarding international coinage. London, 1868.

Selected from Other Sources.

La Question Monetaire. Lettre à M. Frère-Orban, membre de la chambre des représentants de Belgique, par un Economiste. Brochure in-8.

H. Cernuschi. La monnaie bi-métallique. Broch. in-8.

— — Or et argent. Broch. in-8. 1874.

Bernardakis. De la quantité des métaux précieux et du chiffre des monnaies, depuis l'antiquité jusqu'a nos jours. Paris, 1875.

G. J. Goschen. Théorie des changes-Etrangers. Introduction 2d édition, suivie du Rapport fait au nom de la commission du budget de 1875, sur le payment de l'indemnité de guerre et sur les opérations de change qui en ont été la conséquence, par M. Léon Say, membre de l'Institut, ministre des Finances, député de la Seine. 1 vol. in-8. 1875.

Mannequin. La monnaie et le double étalon, théories et pratiques fausses, principes tirés de l'expérience, — monnaie, valeur, richesse, — solution des questions pendantes, uniformité monétaire, par M. Th. Mannequin, membre de la Société d'économie politique de Paris, ancien membre du Comité international des poids, mesures et monnaies à l'Exposition universelle de 1867. Broch. in-8. 1874.

La Question Monetaire. Discussion à la Société d'économie politique belge, le 16 novembre 1873. Broch. in-8.

Ad. Le Hardy de Beaulieu. La question monétaire. Broch. in-8. 1874.

L. Wolowski. La question monétaire. 1 vol. in-8.

— — L'or et l'argent. 1 vol. in-8. 1870.

Victor Bonnet. Etudes sur la monnaie. 1 vol. in-8.

— — Etudes sur la monnaie. Paris 870.

M. Leon. Lettres sur la question des monnaies. Broch. in-8.

De L'Uniformite des Monnaies. Broch. in-8.

Alph. Allard. L'or l'argent et le commerce belge. Broch. in-8.

Em. Levasseur. La question de l'or — Les mines de Californie et d'Australie. — Les anciennes mines d'or et d'argent. — Leur production. — La distribution et l' emploi des métaux précieux. — L'influence des nouvelles mines d'or sur la société. 1 vol. in-8.

Leber. Essai sur l'appréciation de la fortune privée au moyen age, relativement aux variations des valeurs monétaires et du pouvoir commercial de l'argent, suivi d'un examen critique des tables de prix du marc d'argent, depuis l'époque de saint Louis. 2d édition, revue et augmentée. 1 vol. in-8.

A. Bruckner. Finanzgeschichtliche Studien. Kupfergeldkrisen. St. Petersburg, 867.

Denkschrift, betr. deutsche Münzeinigung. Vom bleibend. Ausschusse d. deutschen Handelstages. Berlin, 869.

Schulz, LHA, de metallis nobilibus ex Europa in Asiam defluentibus. 8 Halis 1867 br.

Morato Roma, C. De la monnaie. Lisbonne, 1861. 8°.

Parieu, E. de, les conférences monétaires internationales de 1865 et de 1867 et leurs résultats. Paris, 1869.

Menier. L'unité de l'étalon monétaire. Broch. in-12.

John P. Jones, Senator from Nevada. Speeches in the Senate of the United States, on the question of Gold and Silver. 1876.

Ludwig Bamberger. Reichsgold, 3d ed. Berlin, 1876.

J. Meyer. Das Geldwesen auf einheitlicher Grundlage. Wien, 1874.

Moritz Mohl. Zur Münzfrage. Tübingen, 1871.

Carl Knies. Geld und Credit. von C. Knies, Professor der Staatswissenschaften zu Heidelberg. Berlin 1873. 2 vols. 1874.

August Eggers. Die Geld Reform.

Ludwig Cohnstaedt. Zur Silberfrage. Frankfort a M. 1876.

M. Quenstedt. Die neuen deutschen Münzen. 1872.

H. Cernuschi. M. Michel Chevalier et le Bi-metallisme. Paris, 1876.

Stephen Williamson. Depreciation in the Value of Silver. Liverpool, 1876.

Report of Committee of the House of Commons on the Depreciation of Silver. London, 1876.

J. Malou. Documents Monétaires. Bruxelles, 1874.

Von der Berg. Te Muntquestie. Batavia, 1876.

Adolf Soetbeer. Die deutsche Münzverfassung. Erlangen, 1876.

Minghetti e Finali. Relazione della circolazione cartacea. Esposizione Storica dellé Vicende e degli effetti del corso forzoso in Italia, con Documenti a corredo, etc. 2 vol. 4to. Roma, 1875.

Stephen Williamson. India, in its relation to the Silver Question. Liverpool, 1876.

Samuel Smith. (President of the Chamber of Commerce of Liverpool). Three Letters on the Silver Question. Liverpool, 1876.

Henri Cernuschi. Silver Vindicated. London and New York, 1876. Reprints of a Series of Letters to the Paris Siecle, Paris, 1876.

Societe Neerlandaise pour le progrés dé l'industrie. Adresse à S. M. le Roi—Vrolik, President. F. W. Van Eden, Secrétaire. Haarlem, July, 1876.

J. S. Moore. Letters on the Silver Question, by "The Parsee Merchant." New York, 1877.

Geo. M. Weston. (On the Silver Question.) 1876.

—— Gibson. (On the Silver Question.) 1876.

Hertzka. Währung und Handel. Wien, 1876.

Horace White. The Silver Question. Chicago and New York, 1876.

Walcker. Die Silber-entwerthungs-frage. Strasburg, 1877

ERRATA.

Add to note ‡, page 91: I find in the National Calendar, Washington, 1833, page 251, the following: The first notice of a premium on Gold measured in Silver in the United States appears late in 1821. Before the end of that year it had advanced 5½ per cent. It was afterward 7 per cent.

Page 35, line 25, reads market prices, should read Market Prices of the Precious Metals.

Page 65, last line, reads (as for example, etc.), should read (as for example. the levy of income and the expenditure of Government, local and general, Statutes and Judgments of Courts directing payments. Contract, public and private, etc.)

Page 69, line 17, reads I refer simply, should read I therefore in this Treatise refer merely.

Page 85, line 26–7, reads For it came . . . little, should read For it came not in solid masses, nor by a new supply, but as a result of displacement of existing stock, little by little.

Page 97, line 12, reads of money follow, should read of money to an appreciable extent still follow.

Page 110, line 2, reads the prevailing theory is, should read in scientific debate a theory has seemed to prevail.

Page 118, line 20, reads applied to money, should read when applied to those commodities which are used as money.

Page 118, line 21, reads take account of the peculiarities, should read take special account of the exceptional, nay, unique position of such commodities: of the peculiar effects.

Page 142, Note, reads ihr, should read ihre.

Add to note, p. 43:

Art. 14 contains the following provisions: Debtors can pay their debts in Coins of either Metal at the officially determined and published market price; but nevertheless creditors shall not be compelled to receive more than 500 francs in pièces of 5 francs, more than 50 francs in subsidiary coins, more than 50 centimes in bronze, nor more than 5 centimes in centimes.

In the text, M. Garnier explains: this "limitation of Legal Tender," for it amounts to that: "this concession, he says, is illogical, and we only make it to take away all excuse for the fear of those who are afraid of having to receive too heavy sums of Silver."

It is a concession to the "panic at the invasion of Silver."

It may not be amiss to suggest that a convenient System of Coin Certificates would obviate the necessity of such a regulation.

ADDENDA.

Add to note *, page 75: The act was passed 38 Geo. III. 59, and is entitled "An act to revive and continue (unto 1799) an act (passed 1774) . . . to prohibit the importation of light silver coin of this realm from foreign countries into Great Britain or Ireland; and to restrain the tender thereof beyond a certain sum; and to suspend the coining of Silver." (June 21, 1798.)

The first section revives the act of 1774.

Section 2 is as follows:

"And whereas his Majesty has appointed a committee of his Privy Council to take into consideration the state of the coins of this kingdom, and the present establishment and constitution of his Majesty's mint, and inconvenience may arise from any coinage of Silver until such legislation may be framed as shall appear necessary; and whereas, from the present low price of Silver bullion owing to temporary circumstances, a small quantity of Silver bullion has been brought to the mint to be coined, and there is reason to suppose that a still further quantity may be brought, and it is therefore necessary to suspend the coinage of Silver for the present: Be it therefore enacted, That from and after the passing of this act, no Silver bullion shall be coined at the mint, nor shall any Silver coin that may have been coined there be delivered, any law to the contrary in any wise notwithstanding."

The act of 39 Geo. III. ch. 75, revives and makes perpetual the foregoing act.

It is, however, curious to note that neither in the title nor in the act itself is there any allusion to suspending the coinage of Silver. It is, of course, a valid re-enactment of 38 Geo. III. 59, but no one who reads it would suspect what was concealed under it. It describes the act of 1798 in the same terms as those in which the act of 1798 describes that of 1774.

This may serve in a manner to justify the unconsciousness which writers who are otherwise authorities have manifested on this subject. Even Ricardo at the time was unaware of what was going on. Tooke talks of Silver being legal tender only up to £25, as if that were the effect of the act of 1774; while, except in the work of Ricardo above quoted, and in the statute itself, I have never seen in print a word which reveals the knowledge that the single Gold standard was substantially established in 1798.

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